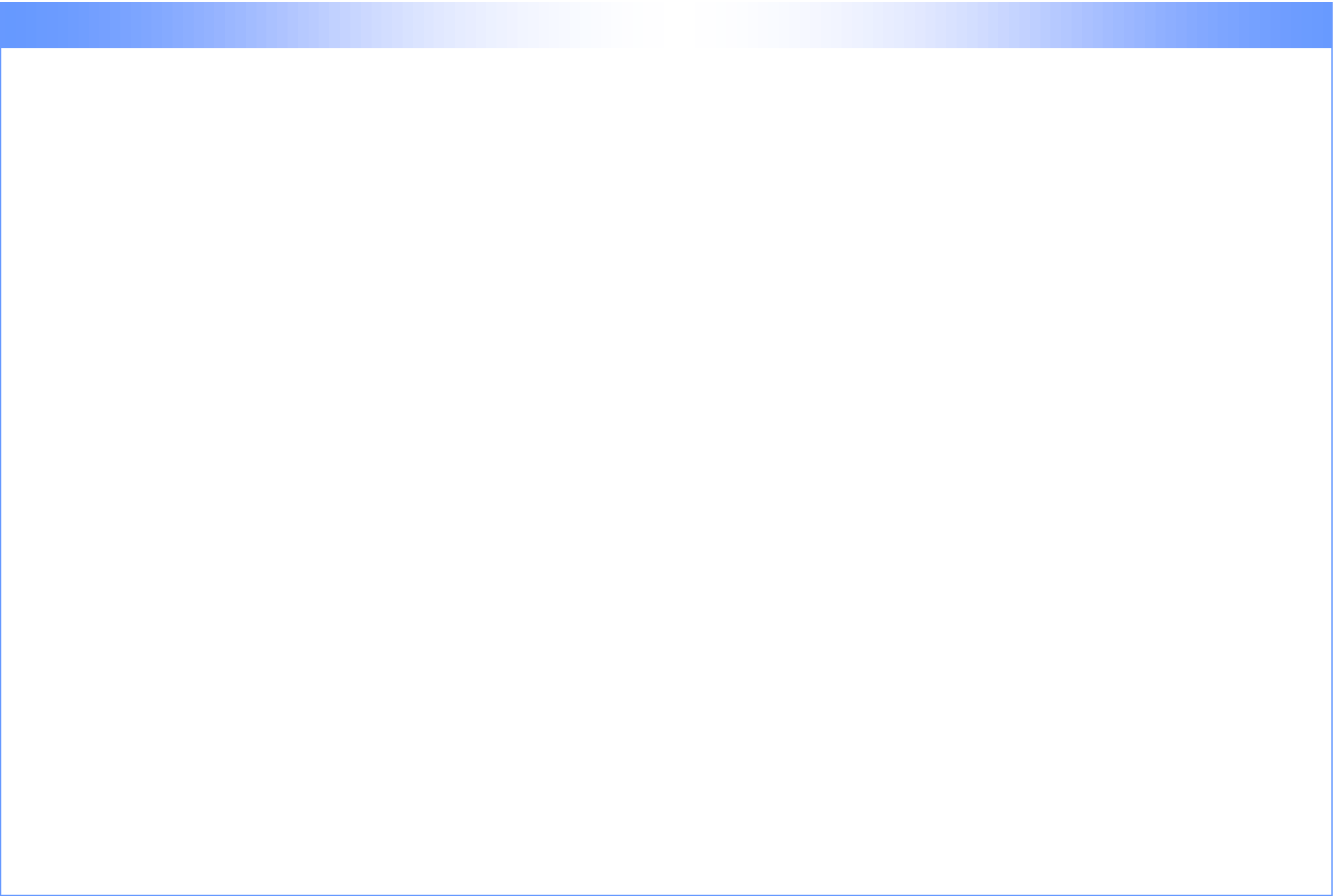
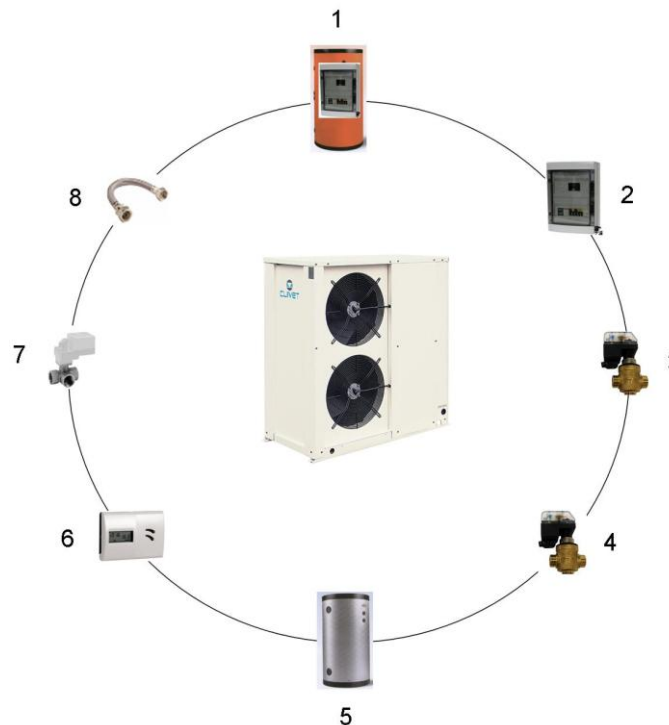




WBAN
WSHN-EE
WSAN-XPR
WSAN-EE







1	PEE20016 / 18	300 or 500 - litres domestic hot water kit	KBQRE3X / KBQER5X
2	PEE20019	Domestic hot water kit control	CACSX
3	PEE20014	Boiler management kit	KVICX
4	PEE20020	Boiler management kit (only for WBAN)	KVICX
5	PEE20015	100 - litres hydraulic circuit-breaker	KSAX
6	PEE20017	Wall electronic ambient thermostat	KITERAX
7	PEE20012 / 13	Kit for management of radiant panels with connections of 1" – 1" ¼	KVMSP1X / KVMSP2X
8	PEE20010 / 11	Water connection hoses with 1" – 1" ¼ connections	KTFL1X / KTFL2X

SCOPE / RECEIVERS

The **RECEIVERS** of this guide are the qualified plumbers and electricians, trained to operate in security according to the local rules and informed on the risks resulted from the hydraulic and electric operations.

The **SCOPE** of the guide is to give the base information about the installation and configuration of the ELFOSystem HOME components.

DEEPENINGS on the functioning and configuration are quoted in the documents:

Clivet_Talk_Compact control system manual– ElfoEnergySmall Application (heat pump electronic)

Clivet_Talk_Compact control system accessory manual – DHW Application (electronic of DHW module)

KITERAX digital timer thermostat user's manual (wall mounted room thermostat)

STRUCTURE of the guide follows the arrangements of operations chronology

System Electrical and hydraulic connections

Setting and configurations of electronic modules

start-up

OPERATIONS SEQUENCE

1 Electrical and hydraulic connections: type - system

1. WBAN o WSHN-EE + DOMESTIC HOT WATER + RADIATORS
2. WBAN o WSHN-EE + DOMESTIC HOT WATER + RADIATORS + RADIANT PANELS
3. WBAN o WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + RADIATORS + BOILER + RADIANT PANELS
4. WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + RADIANT PANELS
5. WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + FAN COILS
6. WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + FAN COILS + RADIANT PANELS
7. WBAN o WSAN-XPR o WSHN-EE o WSAN-EE + BOILER + FAN COILS + RADIANT PANELS

2 Configuration - settings

United mounted communication parameters

Communication parameters on DHW module (PAR menu)

Managed system type (type sistem = 7 → set on machine, type sistem = 1.....6 → set on DHW (CNF menu)

DHW and ANTILEGIONELLA scheduling (DHW, SCH menu)

3 Start-up – settings

date / hour (DHW menu TIME)

System STATE (DHW menu USER)

System SEASON (DHW menu USER)

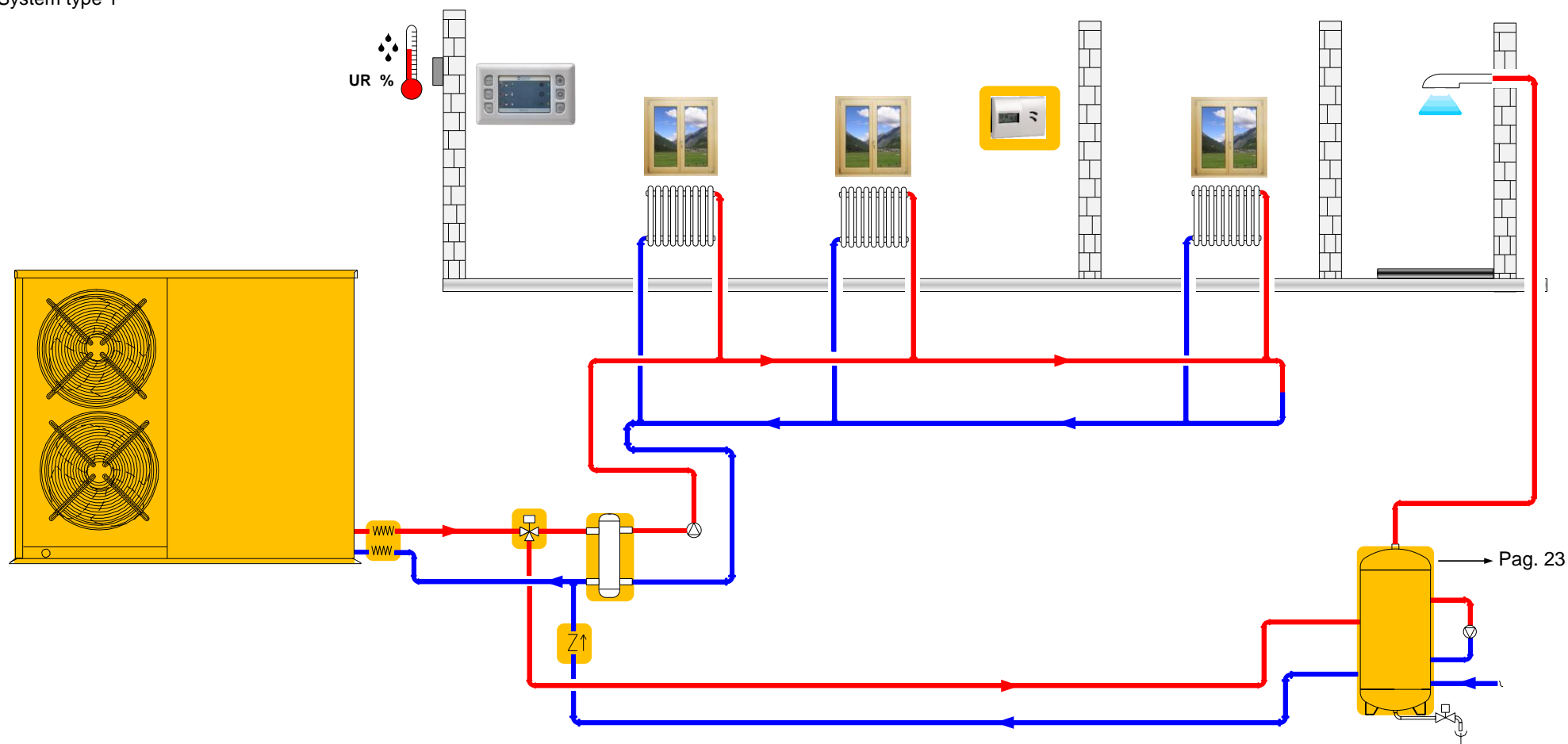
DHW Setpoint (DHW menu USER)

MAINTENANCE Delta (DHW menu USER)

HYDRAULIC DIAGRAM

WBAN o WSHN-EE + DOMESTIC HOT WATER + RADIATORS

System type 1



Indicative plumbing diagram

Only the components supplied or managed by CLIVET are indicated

The system components defined by Designer and Installer are not indicated (ex. expansion tanks, vents, cocks , calibration/safety valves etc.)

300 OR 500 - LITRES DOMESTIC HOT WATER KIT

PEE20016 o 18 1x 1x 1x 1x 1x

100 - LITRES HYDRAULIC CIRCUIT-BREAKER

PEE20015 1x

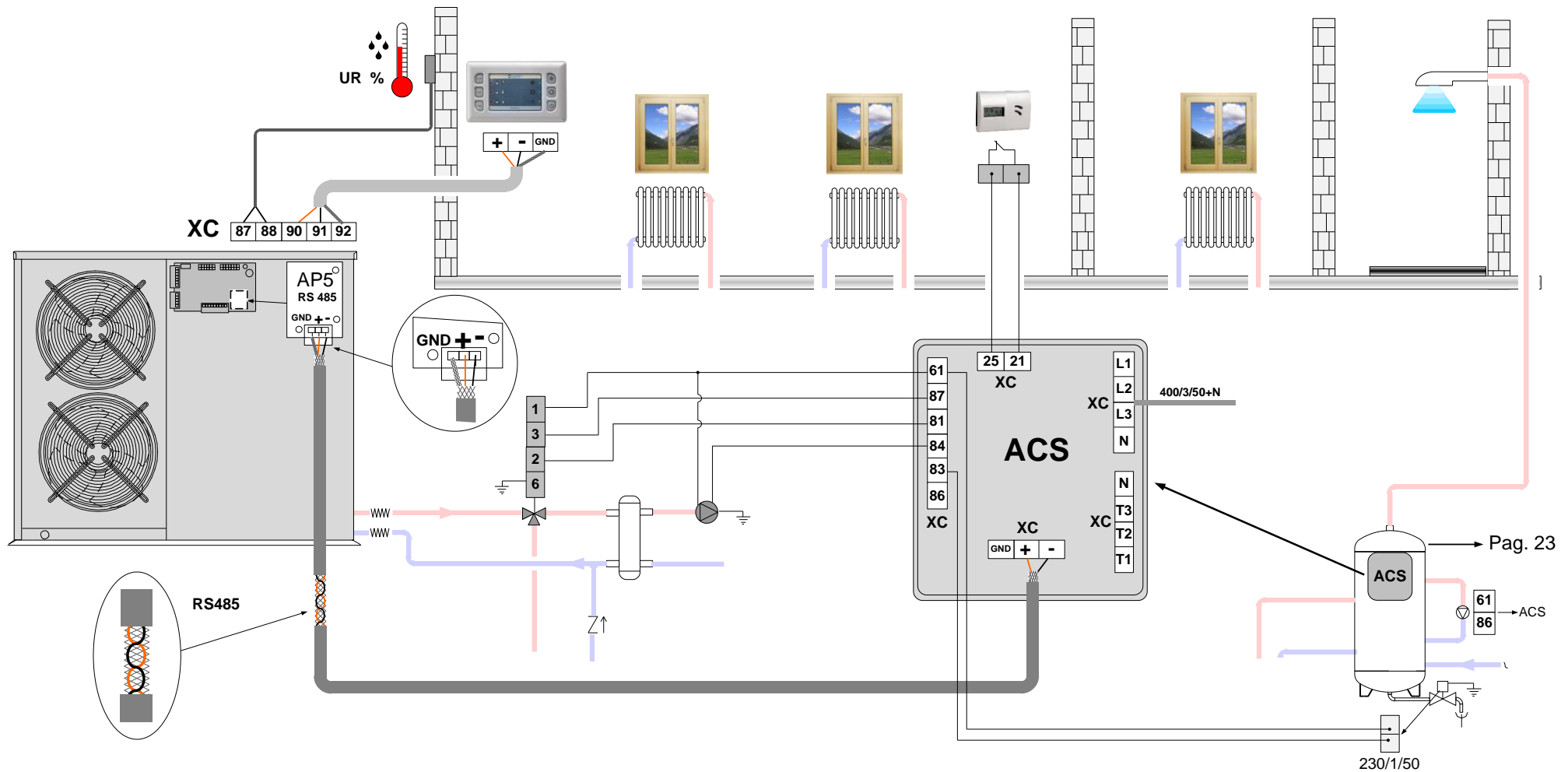
WATER CONNECTION HOSES WITH 1" - 1 1/4 CONNECTIONS

PEE20010 o 11 2x WW

WALL ELECTRONIC AMBIENT THERMOSTAT

PEE20017 1x

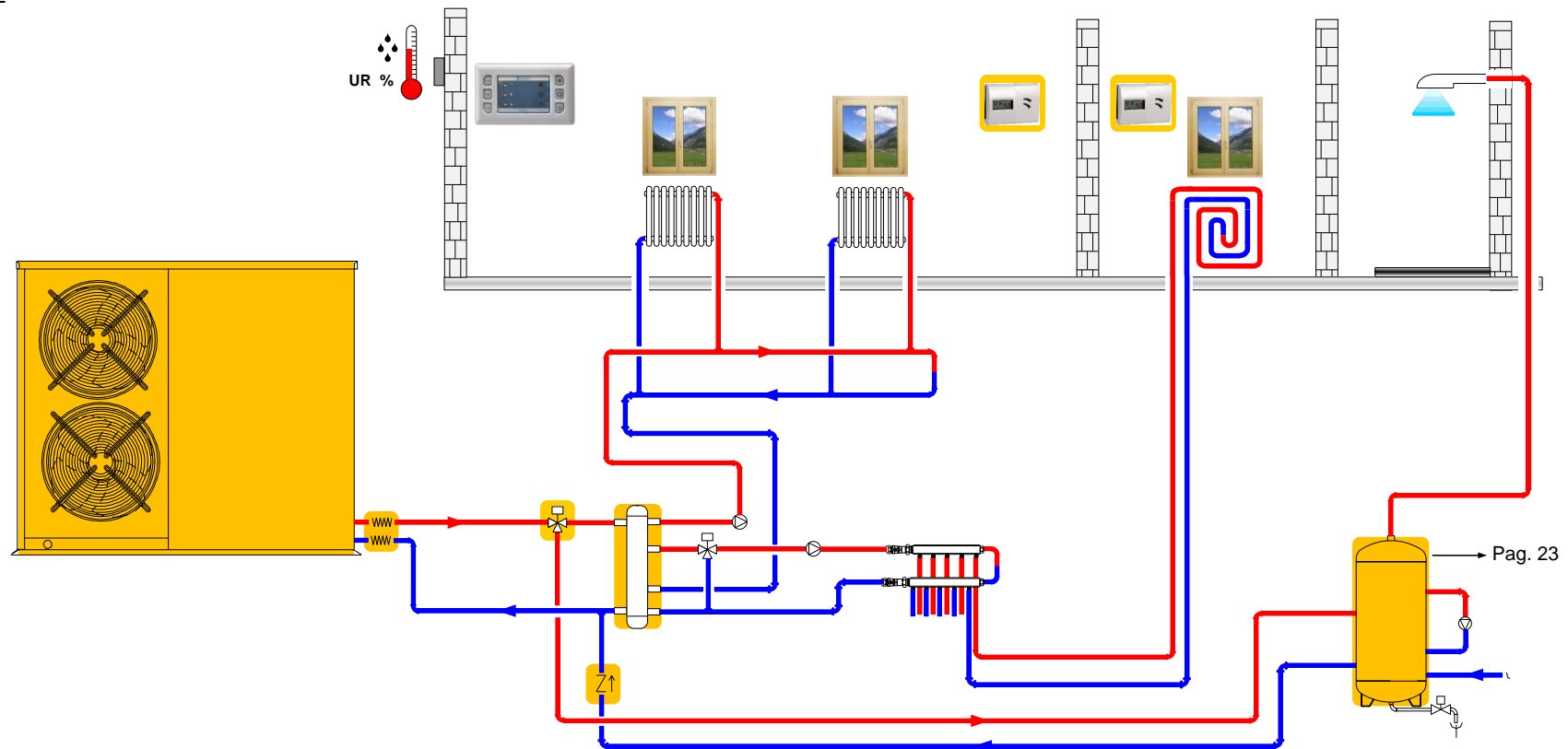
WIRING DIAGRAM



HYDRAULIC DIAGRAM

WBAN o WSHN-EE + DOMESTIC HOT WATER + RADIATORS

System type 2



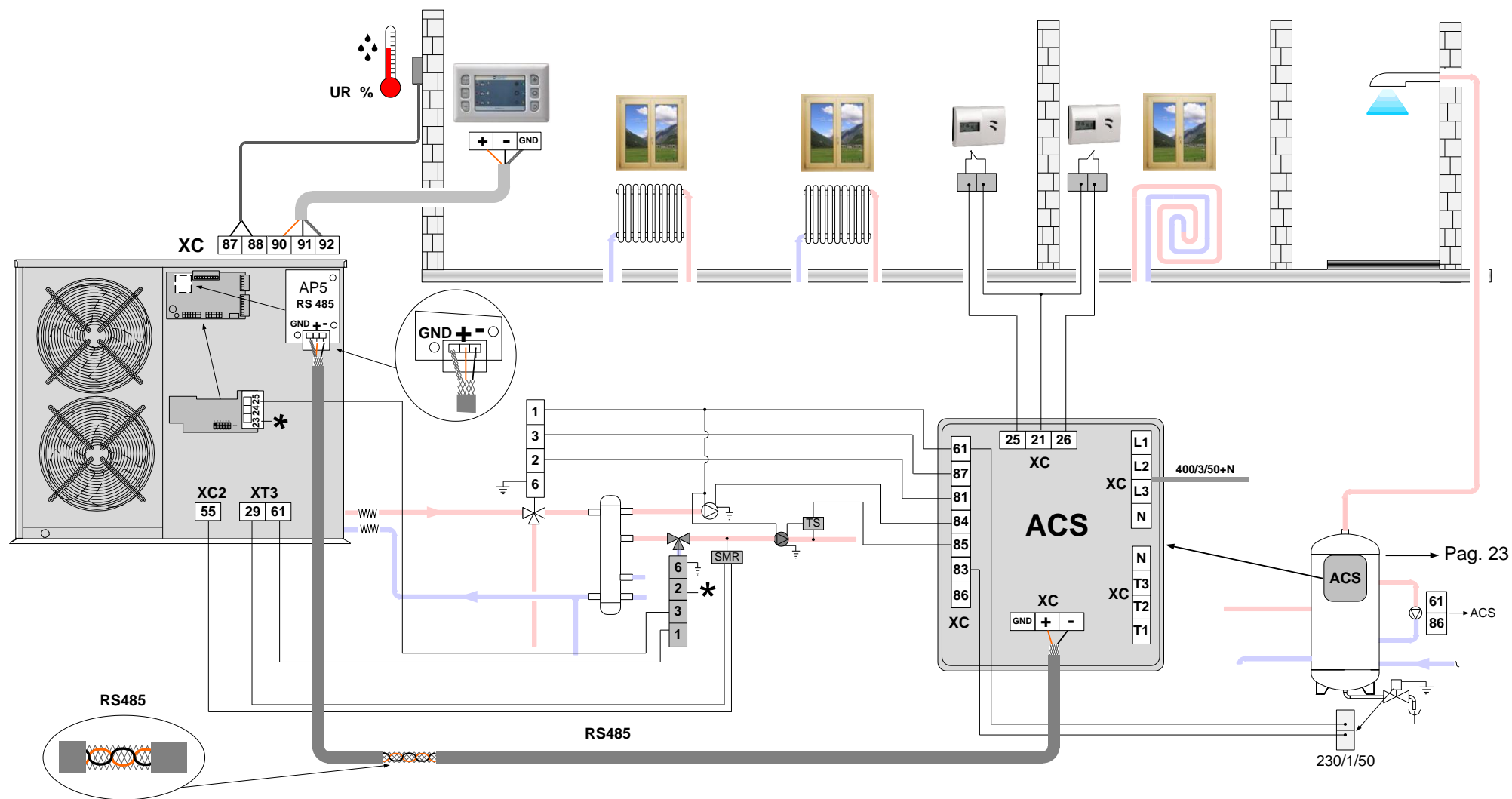
Indicative plumbing diagram

Only the components supplied or managed by CLIVET are indicated

The system components defined by Designer and Installer are not indicated (ex. expansion tanks, vents, cocks , calibration/safety valves etc.)

<p>300 OR 500 - LITRES DOMESTIC HOT WATER KIT</p> <p>PEE20016 o 18 1x 1x 1x 1x 1x 1x </p>	<p>WATER CONNECTION HOSES WITH 1" – 1" ¼ CONNECTIONS</p> <p>PEE20010 o 11 2x </p>	<p>100 - LITRES HYDRAULIC CIRCUIT-BREAKER</p> <p>PEE20015 1x </p>
<p>KIT FOR MANAGEMENT OF RADIANT PANELS WITH CONNECTIONS OF 1" – 1" ¼</p> <p>PEE20012 o 13 1x 1x 1x 1x KA1 </p>	<p>WALL ELECTRONIC AMBIENT THERMOSTAT</p> <p>PEE20017 2x </p>	

WIRING DIAGRAM

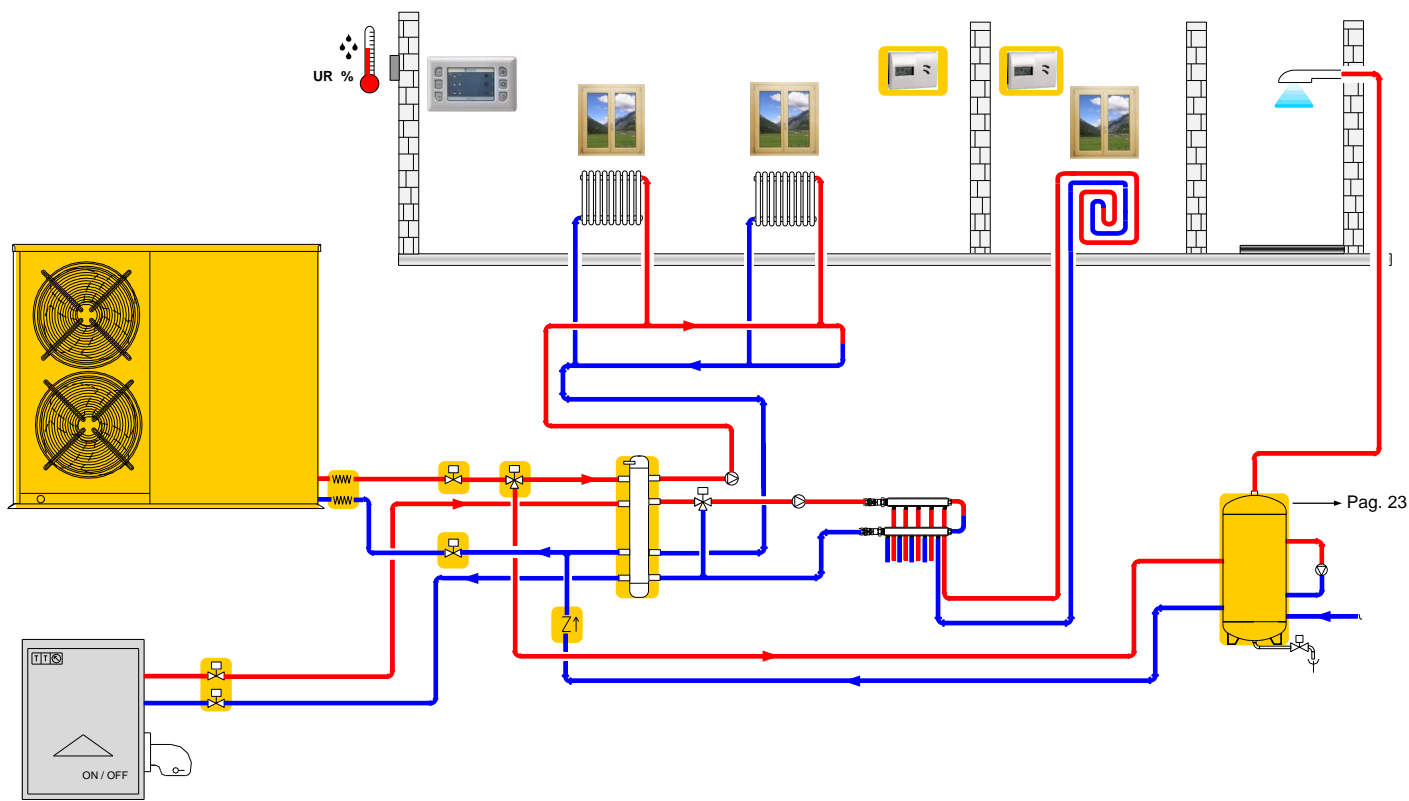


*  KA1 ⇒ See details at page 25

HYDRAULIC DIAGRAM

WBAN o WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + RADIATORS + BOILER + RADIANT PANELS

System type 3



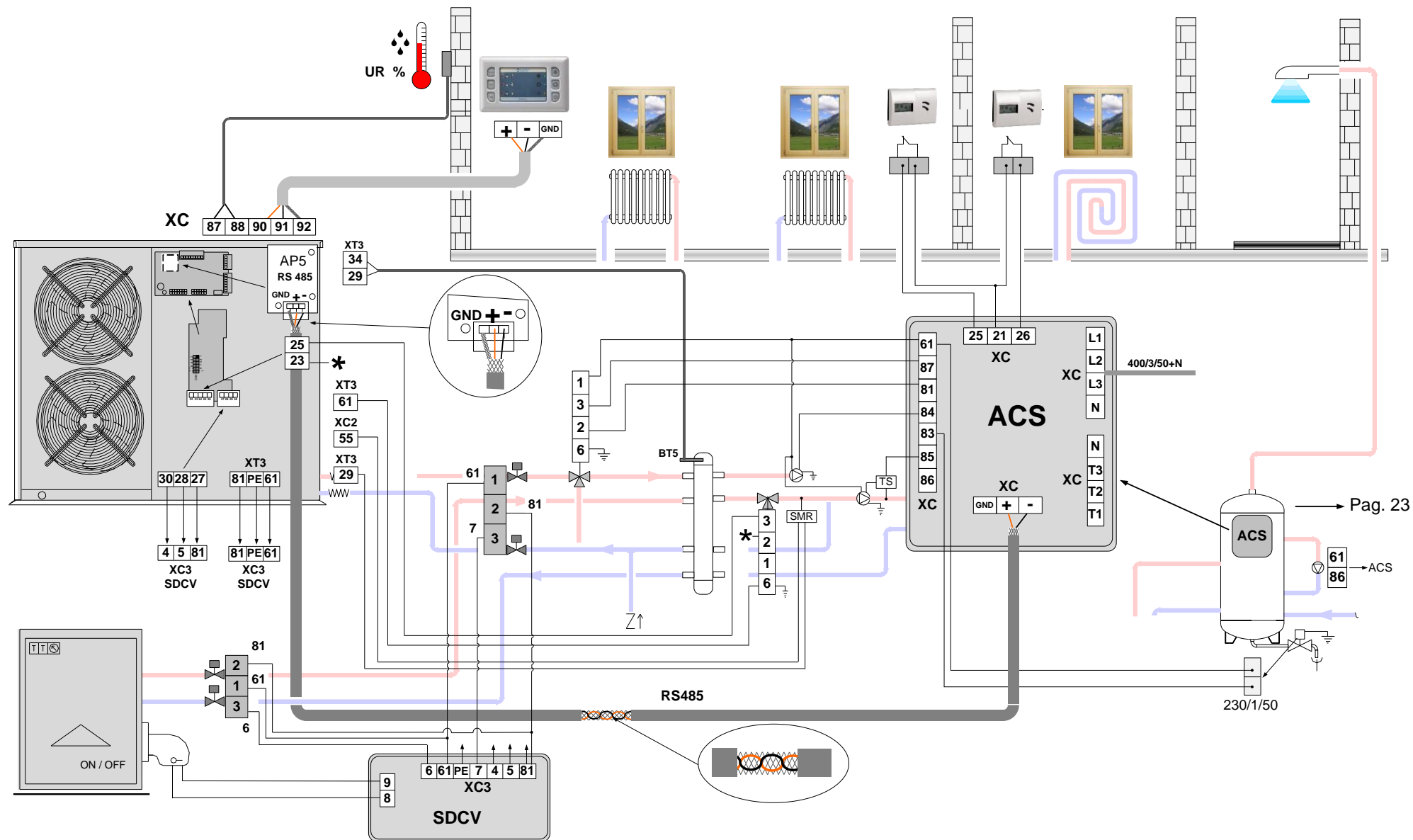
Indicative plumbing diagram

Only the components supplied or managed by CLIVET are indicated

The system components defined by Designer and Installer are not indicated (ex. expansion tanks, vents, cocks, calibration/safety valves etc.)

<p>300 OR 500 - LITRES DOMESTIC HOT WATER KIT</p> <p>PEE20016 o 18 1x 1x 1x 1x 1x 1x 1x </p>	<p>WATER CONNECTION HOSES WITH 1" – 1" ¼ CONNECTIONS</p> <p>PEE20010 o 11 2x </p>	<p>100 - LITRES HYDRAULIC CIRCUIT-BREAKER</p> <p>PEE20015 1x </p>	<p>WALL ELECTRONIC AMBIENT THERMOSTAT</p> <p>PEE20017 2x </p>
<p>BOILER MANAGEMENT KIT</p> <p>PEE20014 2x 2x 1x 1x 1x </p>	<p>KIT FOR MANAGEMENT OF RADIANT PANELS WITH CONNECTIONS OF 1" – 1" ¼</p> <p>PEE20012 o 13 1x 1x 1x 1x </p>		

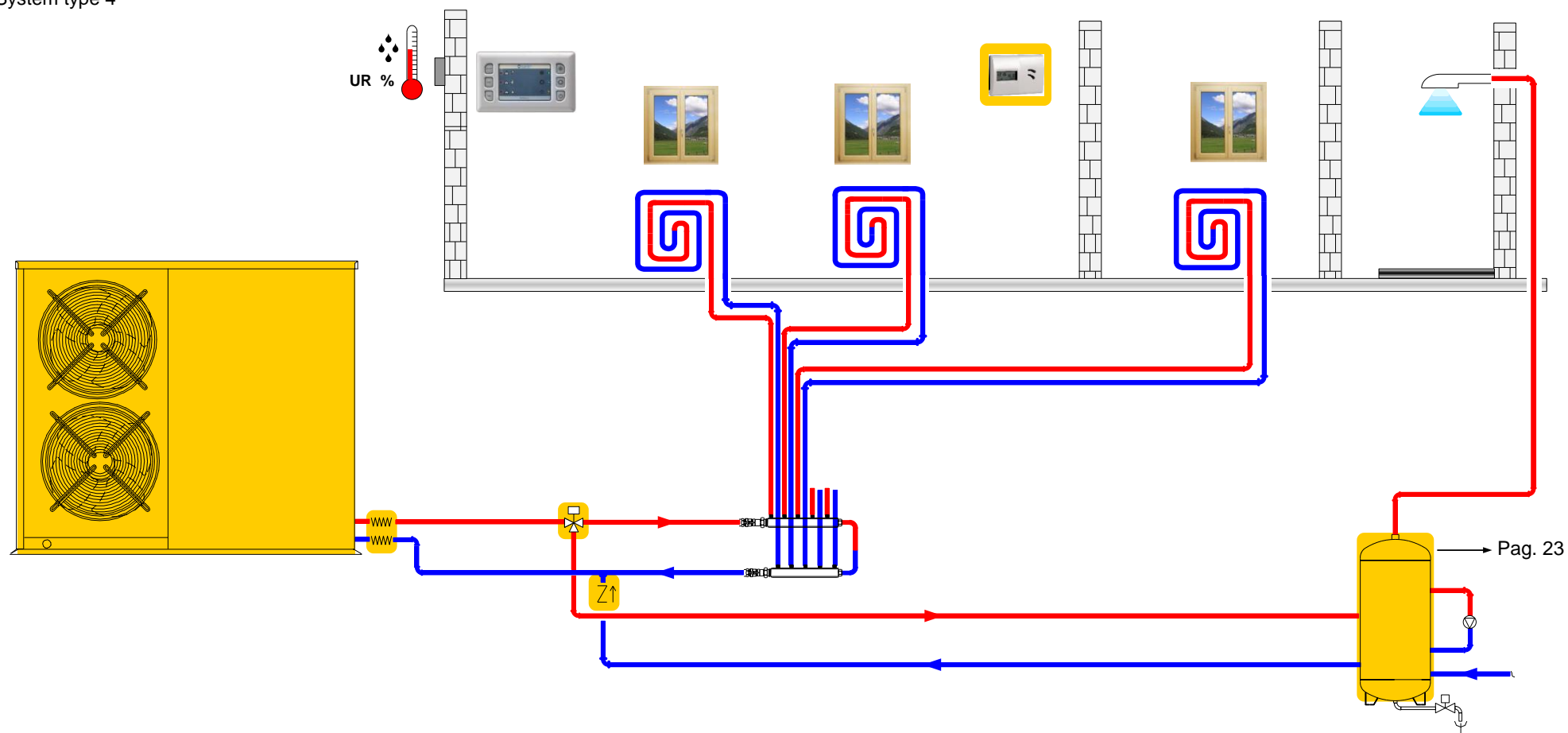
WIRING DIAGRAM



HYDRAULIC DIAGRAM

WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + RADIANT PANELS

System type 4



Indicative plumbing diagram

Only the components supplied or managed by CLIVET are indicated

The system components defined by Designer and Installer are not indicated (ex. expansion tanks, vents, cocks , calibration/safety valves etc.)

300 OR 500 - LITRES DOMESTIC HOT WATER KIT

PEE20016 o 18

1x



1x



1x



1x



1x



PEE20010 o 11

2x WW

WATER CONNECTION HOSES WITH 1" - 1 1/4" CONNECTIONS

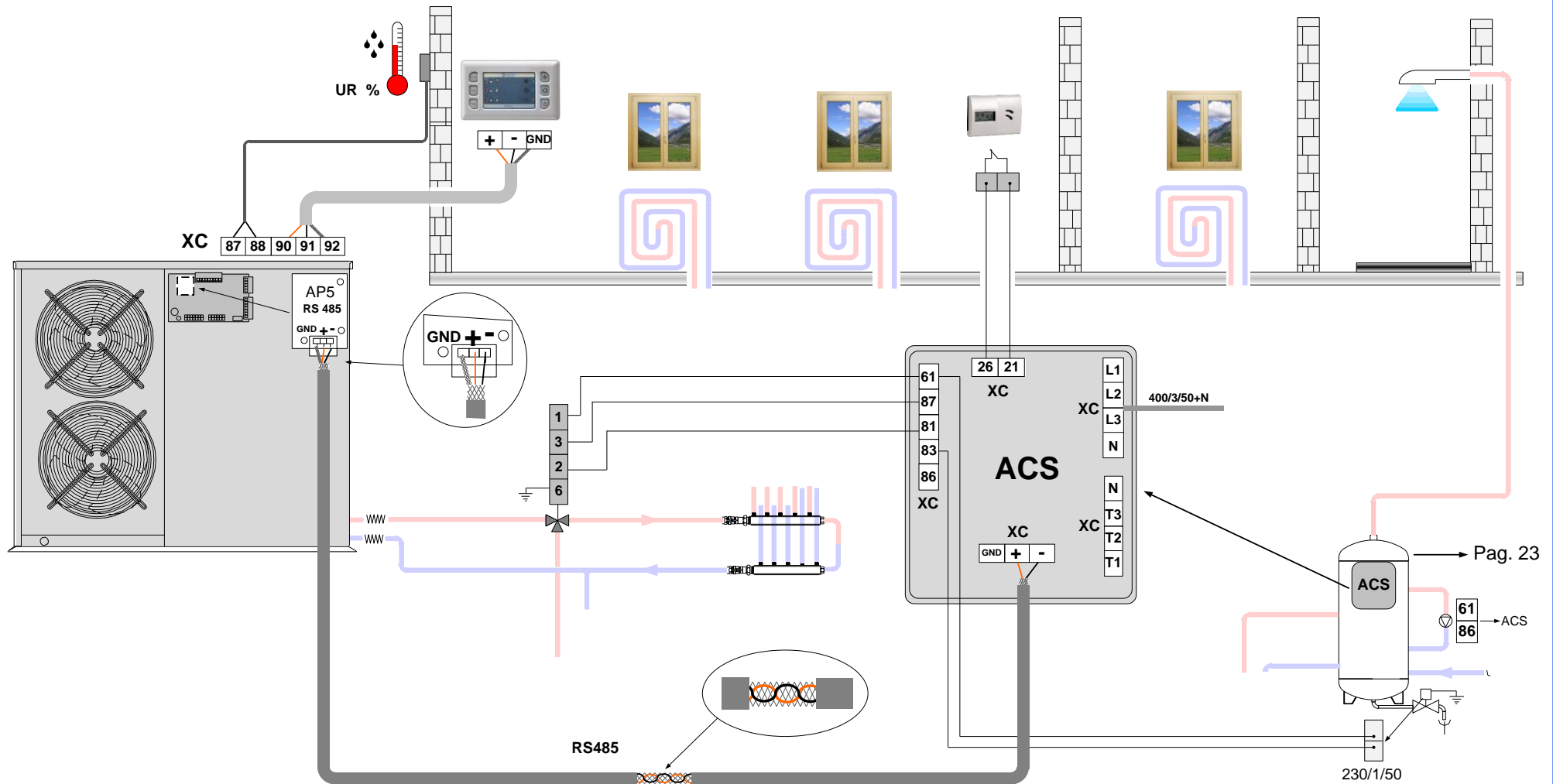
WALL ELECTRONIC AMBIENT THERMOSTAT

PEE20017

1x



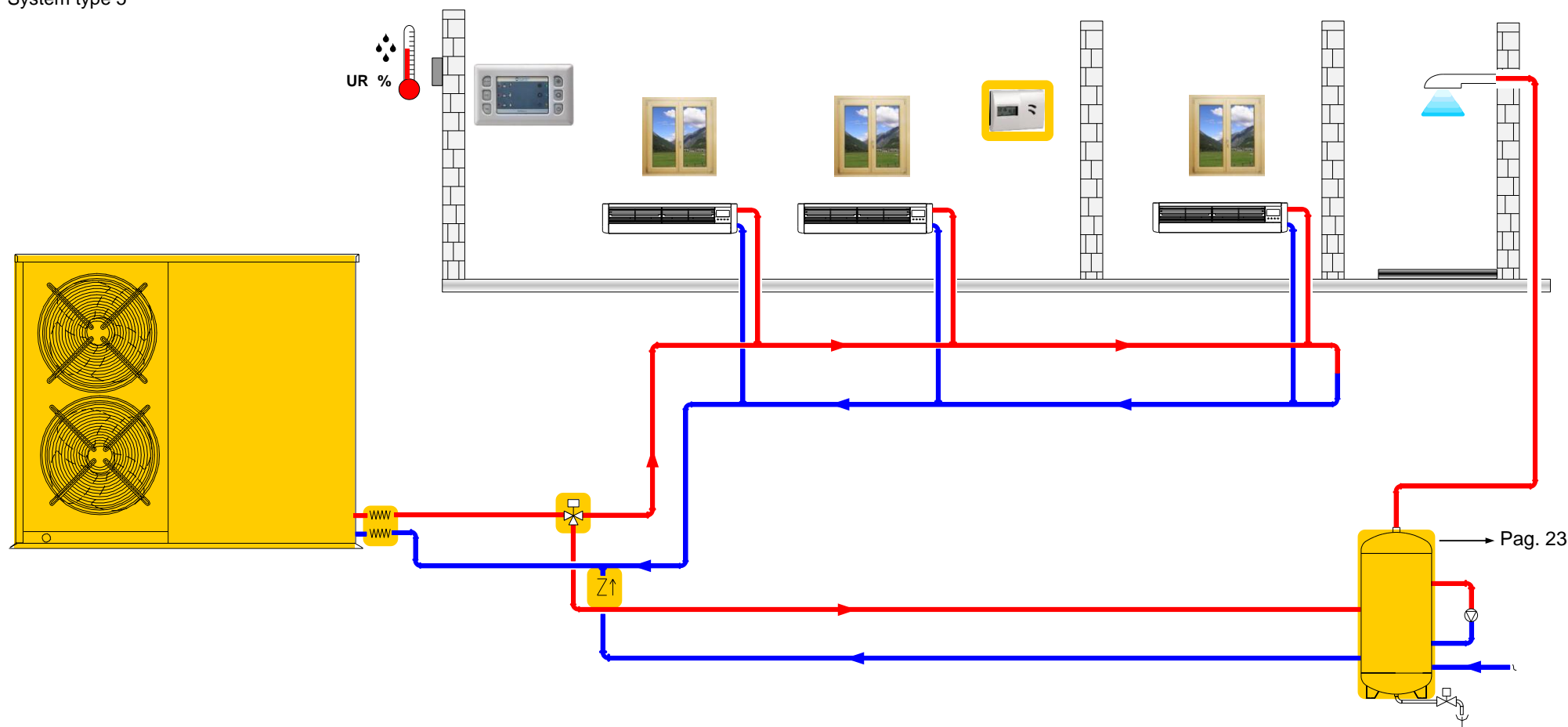
WIRING DIAGRAM



HYDRAULIC DIAGRAM

WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + FAN COILS

System type 5



Indicative plumbing diagram

Only the components supplied or managed by CLIVET are indicated

The system components defined by Designer and Installer are not indicated (ex. expansion tanks, vents, cocks , calibration/safety valves etc.)

300 OR 500 - LITRES DOMESTIC HOT WATER KIT

PEE20016 o 18

1x



1x



1x



1



1x



WATER CONNECTION HOSES WITH 1" – 1" ¼ CONNECTIONS

PEE20010 o 11

2x WWW

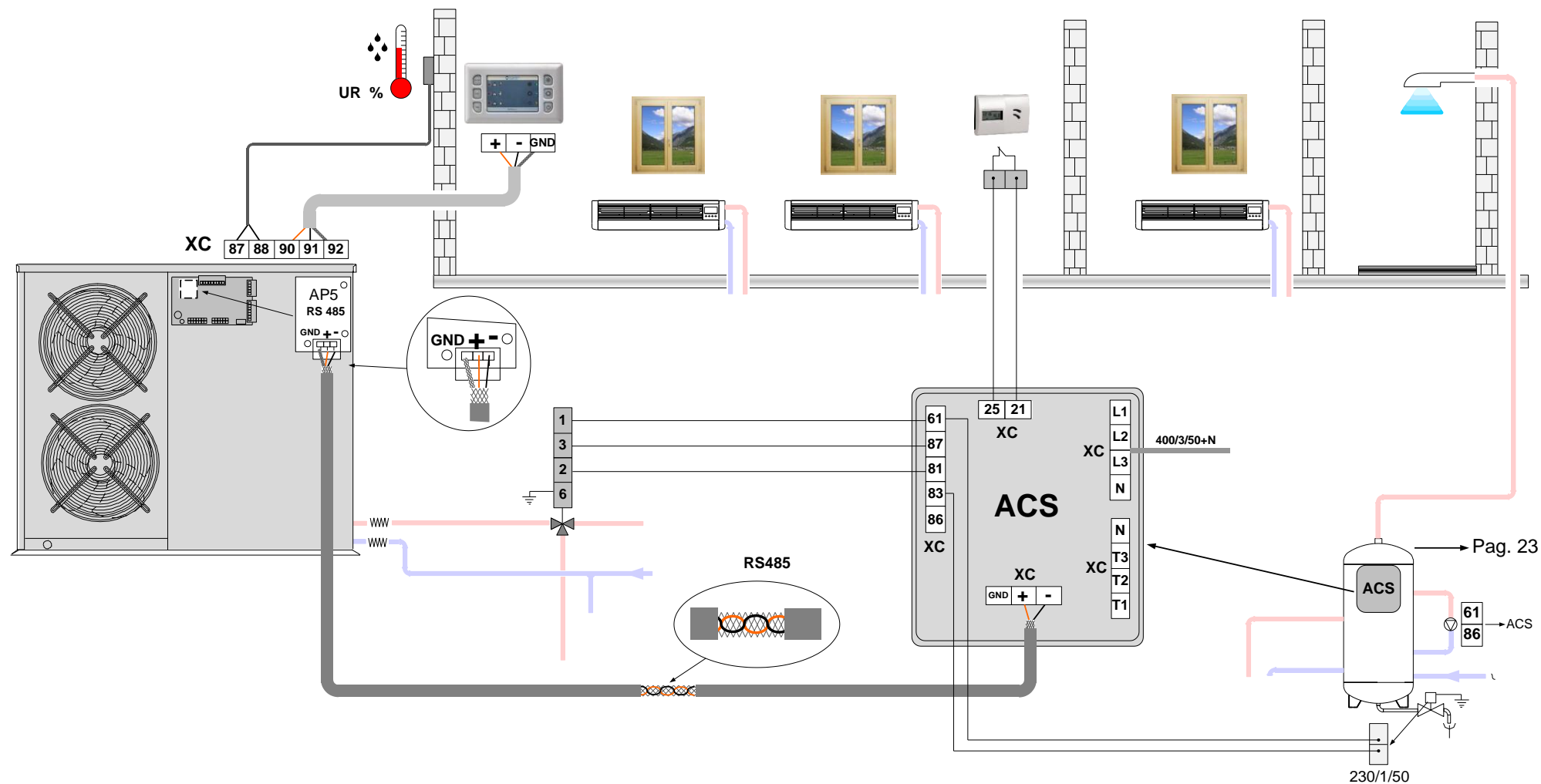
WALL ELECTRONIC AMBIENT THERMOSTAT

PEE20017

1



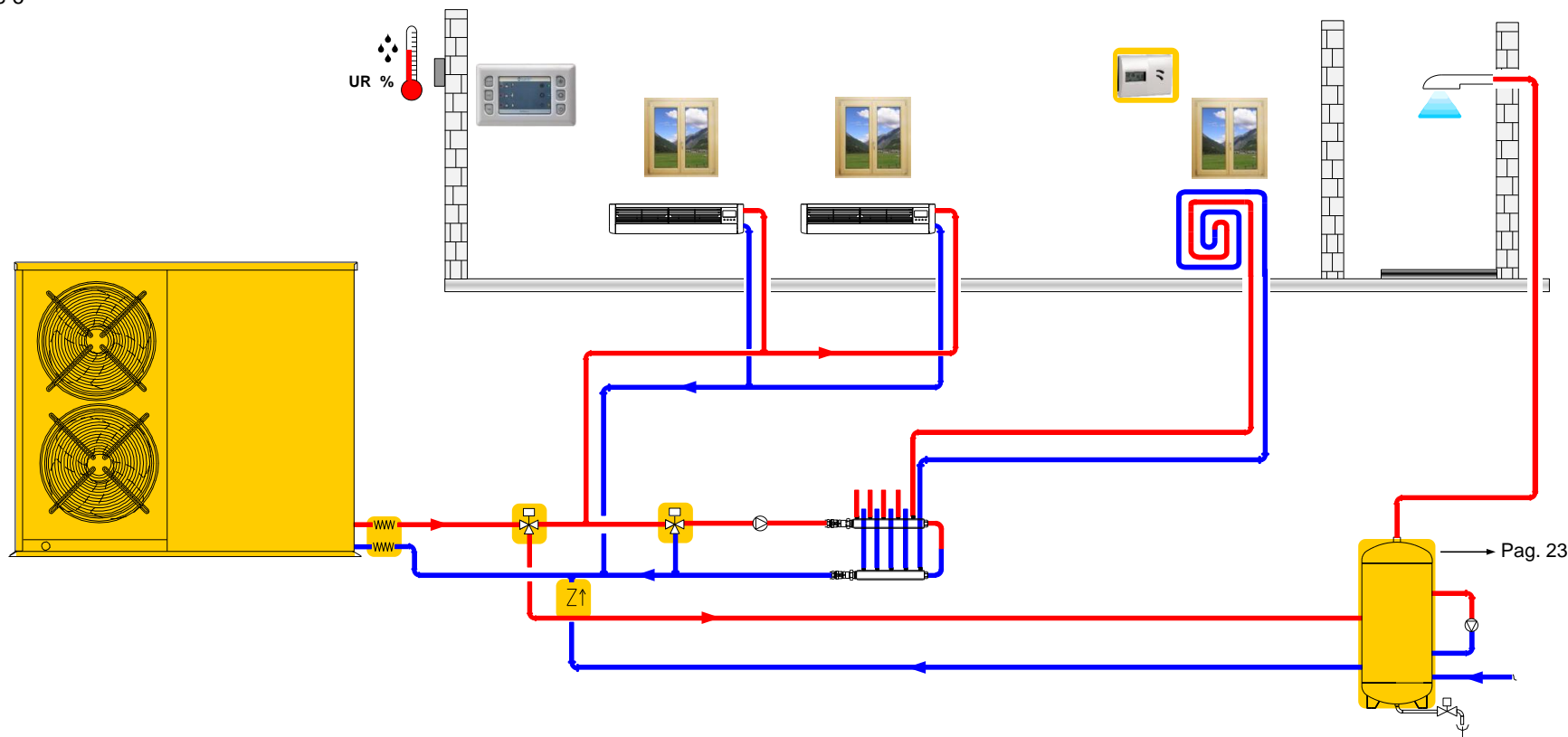
WIRING DIAGRAM



HYDRAULIC DIAGRAM

WBAN o WSAN-XPR o WSHN-EE o WSAN-EE + BOILER + RADIANT PANELS + FAN COIL

System type 6



Indicative plumbing diagram

Only the components supplied or managed by CLIVET are indicated

The system components defined by Designer and Installer are not indicated (ex. expansion tanks, vents, cocks , calibration/safety valves etc.)

300 OR 500 - LITRES DOMESTIC HOT WATER KIT

PEE20016 o 18

1x



1x



1x



1x



1x



WATER CONNECTION HOSES WITH 1" – 1 1/4" CONNECTIONS

PEE20010 o 11

2x



WALL ELECTRONIC AMBIENT THERMOSTAT

PEE20017

1x



KIT FOR MANAGEMENT OF RADIANT PANELS WITH CONNECTIONS OF 1" – 1 1/4"

PEE20012 o 13

1x



1x



1x

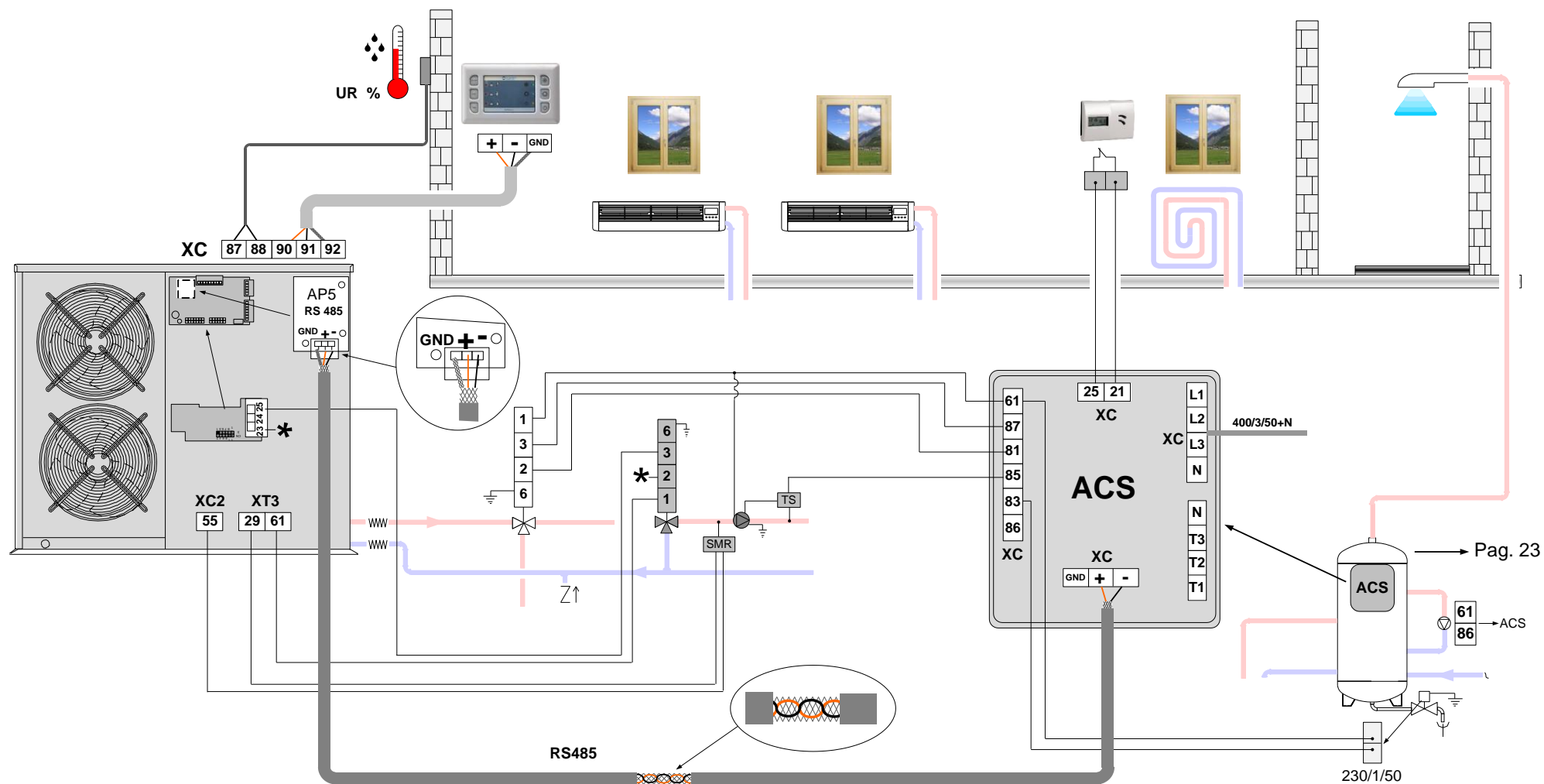



1x

KA1



WIRING DIAGRAM

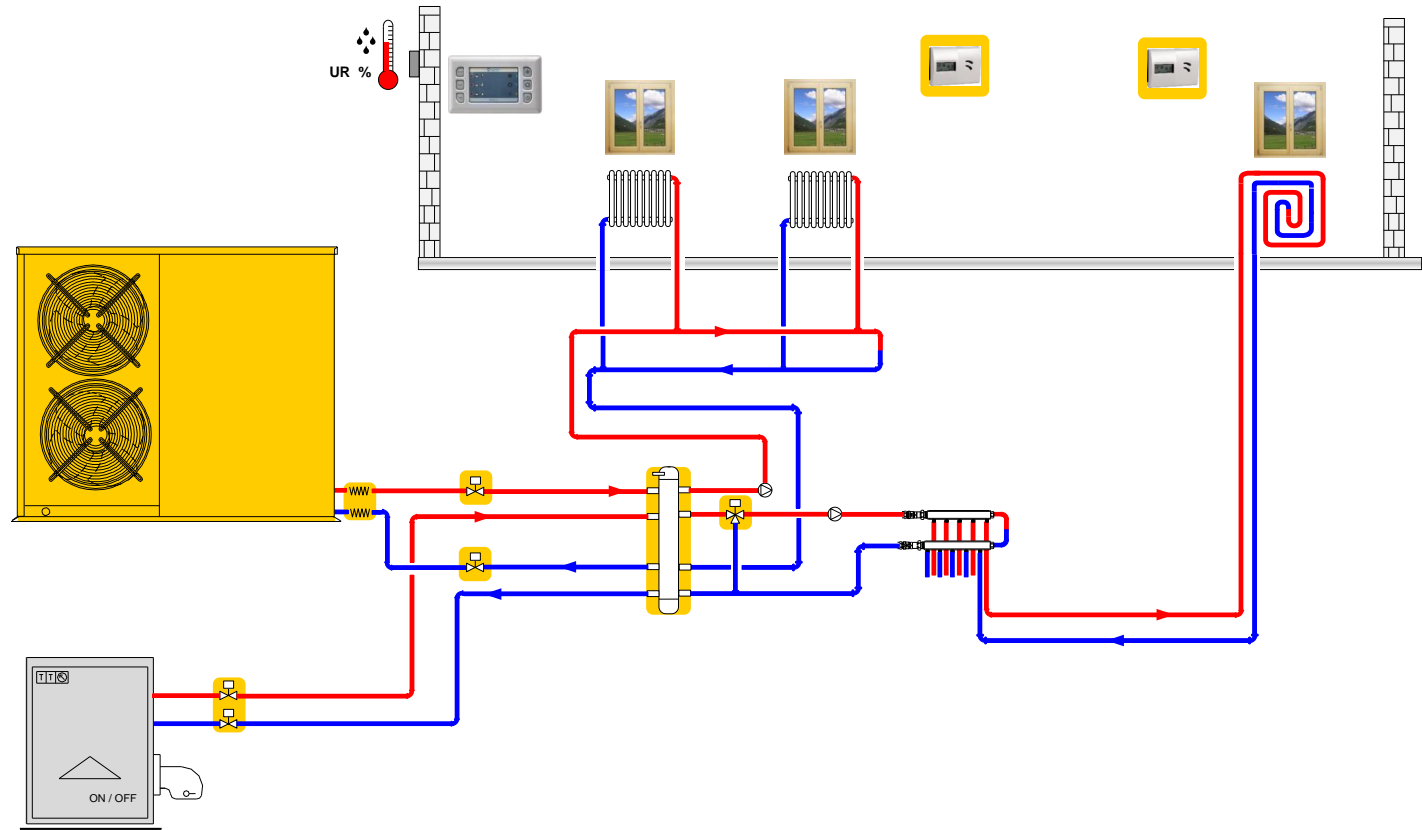


*  KA1 ⇒ See details at page 25

HYDRAULIC DIAGRAM

WBAN o WSAN-XPR o WSHN-EE o WSAN-EE + BOILER + RADIANT PANELS + FAN COILS












System type 7



Indicative plumbing diagram

Only the components supplied or managed by CLIVET are indicated

The system components defined by Designer and Installer are not indicated (ex. expansion tanks, vents, cocks , calibration/safety valves etc.)

BOILER MANAGEMENT KIT										WATER CONNECTION HOSES WITH 1" – 1" ¼ CONNECTIONS					100 - LITRES HYDRAULIC CIRCUIT-BREAKER																		
PEE20014		2x				2x				1x				1x				1x		BT5		PEE20010 o 11		2x				PEE20015		1x			
KIT FOR MANAGEMENT OF RADIANT PANELS WITH CONNECTIONS OF 1" – 1" ¼															WALL ELECTRONIC AMBIENT THERMOSTAT																		
PEE20012 o 13		1x				1x				1x				1x		KA1				PEE20017		2x											

WIRING DIAGRAM



1. Unit mounted communications parameters
2. Communication parameters on DHW module (PAR menu)
3. (System type = 7 → setting on machine, System type = 1.....6 → setting on DHW,menu CNF)
4. DHW and ANTILEGIONELLA scheduling (DHW , SCH menu)

1 machine communication



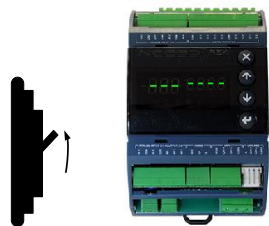
Parameter	Mnemonic name	Description	Default	Min	Max
163	RemMode	Remote input setting 0=H/C from ID 1=H/C from keypad or supervisor	1	0	1
164	Address	ModBus serial address	1	0	127
165	Baud Rate	Baud Rate (0=4800 / 1=9600)	1	0	1
166	Parity	Parity 0=NO / 1=YES	0	0	1
213	CommandH2O	Set up the priority of who determines the request of sanitary water	0	0	1
50	EnH20sanitaria	Sanitary water valve control enabling	2	0	2

CommandH2O=1 :the request of production of domestic hot water is taken only by the supervisor (activation and deactivation), or the machine digital input status is always ignored.

164,165,166 parameters must be the same as **33,34,35 parameters** of DHW module

COMMUNICATION PARAMETERS ON DHW MODULE

2 DHW communication

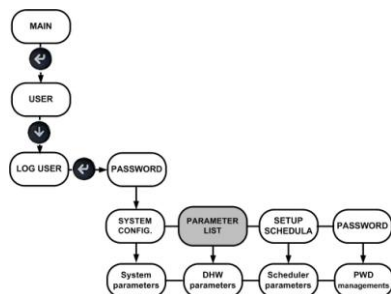


➔ ➔ 1 min. ➔ OK

As soon as it is powered, on the display will appear **LOAD** it is necessary to wait 1 minute for the software loading

Parameter	Mnemonic name	Description	Default	Min	Max
P33	Index	Index: switch address	1	0	127
P34	Baud Rate	BaudRate 0=4800 1:9600 2:19200	1	0	1
P35	Parita	Parity (0=no, 1=ODD, 2=Even)	0	0	1
P49	EnableBT2	EnableBT2 0 = absent probe 1 = present probe	1	0	1
P69	TimeOutRete	TimeOutRete: Timeout time for serial communication (Modbus)	60	1	600
I09	Interazione	Interaction 0 = electromech., 1 = via bus	1	0	1
I27	EnSolare	0= managing DHW 3-ways valve 1=enabled solar	0	0	1
I36		Resistance forcing 0 = disabled N = the set value indicates the temperature in °C under which the resistances are forced in On.			

How to modify the parameters in the PARAMETER LIST menu



1 First screenshot

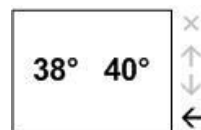
2 Select Log User

3 Confirm

4 Insert password

5 Confirm password

6 Select menu



How to modify the parameters

6 Confirm

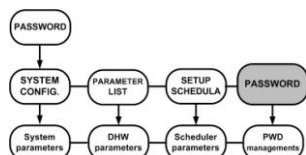
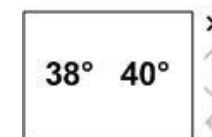
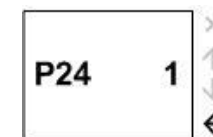
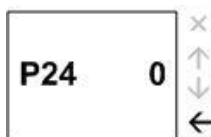
7 Select parameter

8 Confirm

9 Modify parameter

10 Confirm

11 Main menu (press X twice)



Slide PASSWORD menu and set MDS parameter = 0 (Master)

SYSTEM TYPE MANAGED

System 1 ⇒ WBAN o WSHN-EE + DOMESTIC HOT WATER + RADIATORS (pag. 1)

System 2 ⇒ WBAN o WSHN-EE + DOMESTIC HOT WATER + RADIATORS + RADIANT PANELS (pag.3)

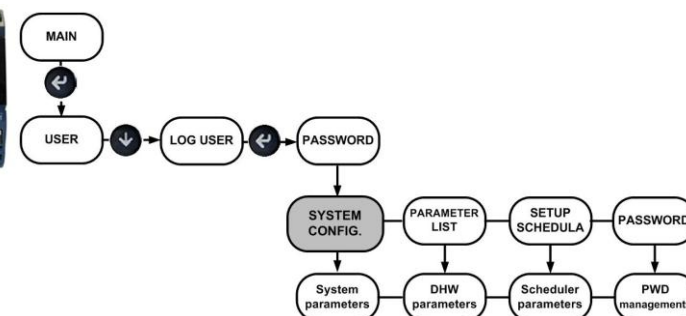
System 3 ⇒ WBAN o WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + RADIATORS + BOILER + RADIANT PANELS (pag.5)

System 4 ⇒ WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + RADIANT PANELS (pag.7)

System 5 ⇒ WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + FAN COILS (pag.9)

System 6 ⇒ WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + FAN COILS + RADIANT PANELS (pag. 11)

System 7 ⇒ WBAN o WSAN-XPR o WSHN-EE o WSAN-EE + BOILER + FAN COILS + RADIANT PANELS (pag.13)



Access at CNF menu

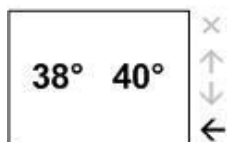
Set C0....C02 parameters as shown in the table on page



System type 7 see on page 19

How to have access at the menu (CNF system parameters list **– PAR** DHW parameters list **– SCH** scheduler parameters list **– PAS** password change)

1 First screenshot



2 Select Log User



3 Confirm



4 Insert password



5 Confirm password



6 Select menu



How to modify the parameters in the SYSTEM CONFIGURATION menu

6 Confirm



7 Select parameter



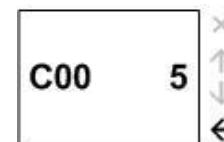
8 Confirm



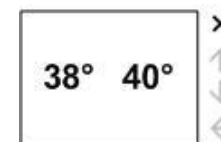
9 Modify parameter



10 Confirm



11 Main menu (press X twice)



DHW PARAMETERS

Parameters	Mnemonic	Description	Sys. 1	Sys. 2	Sys. 3	Sys. 4	Sys. 5	Sys. 6
C00	Config Impianto	Type of managed system	1	2	3	4	5	6
C01	EnTermAmb	Ambient thermostat is present	1	1	1	1	1	1
C02	EnTermRad	Radiant panel thermostat is present		1	1			
CLIMATIC COMPENSATIONS								
C03	CompExt	Outside temp. compensation enabling	0	0	0	0	0	0
C04	CextMaxH	Outside temp. of winter max. correction	15			15	15	15
C05	CextMinH	Outside temp. of winter min. correction	0			0	0	0
C06	MaxCExtH	Winter correction max. value	10			10	10	10
C07	EnCompExtR	Radiant compensation enabling of the outside temp.		0	0			
C08	SetMinC	Min. Setpoint in cooling		18	18			
C09	SetMaxC	Max. Setpoint in cooling		23	23			
C10	TMinExtC	Min. outside temp. on cooling		20	20			
C11	TMaxExtC	Max. outside temp. on cooling		35	35			
C12	SetMinH	Min. Setpoint in heating		30	30			
C13	SetMaxH	Max. Setpoint in heating		35	35			
C14	TMinExtH	Min. outside temp. on heating		5	5			
C15	TMaxExtH	Max. outside temp. on heating		20	20			
HEAT PUMP OPTION								
C16	URProbeExt	Enables ext. RH% probe	0	0	0	0	0	0
HEAT PUMP SETPOINT								
C17	SetCool	Summer Setpoint		5.7	5.7	5.7	5.7	5.7
C18	SetHeat	Winter Setpoint	41.2	41.2	41.2	41.2	41.2	41.2
C19	SetMantCool	Summer Maintenance Setpoint		20	20	20	20	20
C20	SetMantHeat	Winter Maintenance Setpoint	30	30	30	30	30	30
C21	SaltoH2O	Differential between heat pump Setpoint and SetAccumulo	3.0	6.0	6.0	6.0	6.0	6.0
C22	SetPointR	Radiant Setpoint		25	25	25		25
DHW OPTION								
C23	DeltaMantACS	DHW production maintenance Delta	10.0	10.0	10.0	10.0	10.0	10.0
C24	BandaSanitaria	DHW production band	2.0	2.0	2.0	2.0	2.0	2.0
C25	SetAccumACS	DHW production storage set	45.0	45.0	45.0	45.0	45.0	45.0
C26	SetLegioACS	DHW production Legio set	65.0	65.0	65.0	65.0	65.0	65.0
C27	SetHotH2OACS	DHW production Set Hot H2O	60.0	60.0	60.0	60.0	60.0	60.0

The parameters in common with the heat pump must be modified **only by the DHW module**, on the contrary it is produced conflict between the datum memorized on the heat pump and the one memorized on the module.












HEAT PUMP PARAMETERS

This system is directly managed by heat pump because is without DHW (domestic hot water)part .

Control on PDC the following parameters

Parameters	Mnemonic	Description	Sys. 7
CLIMATIC COMPENSATIONS			
9	CompExt	External temperature compensation enabling	0
12	CextMaxH	Ext. temp. for max. winter correction	15
13	CextMinH	Ext. temp. for min. winter correction	0
15	MaxCExtH	Max. value of winter correction	10
190	EnCompExtR	External temperature radiating compensation enabling	0
194	SetMinC	Min. set-point in cooling	18
195	SetMaxC	Max. set-point in cooling	23
196	TMinExtC	Min. external temperature in cooling	20
197	TMaxExtC	Max. external temperature in cooling	35
198	SetMinH	Min. set-point in heating	30
199	SetMaxH	Max. set-point in heating	35
200	TMinExtH	Min. external temperature in heating	5
201	TMaxExtH	Max. external temperature in heating	20
HEAT PUMP OPTION			
156	URProbeExt	Enables external RH% probe	0
HEAT PUMP SETPOINT			
32	SetCool	Summer Set Point	5.7
33	SetHeat	Winter Set Point	41.2
42	SetMantCool	Summer maintenance Set Point	20
43	SetMantHeat	Winter maintenance Set Point	30
192	SetPointR	Radiating set-point	25

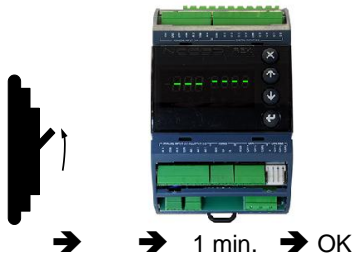
SYMBOLS VISUALIZATION

LED	NAME	MEANING
	SUMMER	On: it indicates summer
	WINTER	On: it indicates winter
	3-WAY VALVE	Off: it indicates the valve commutated on the system On: it indicates the valve commutated on DHW Flashing: it indicates the DHW production with heat pump in progress
	ROOM PUMP	Off: it indicates the room pump off On: it indicates the room pump on by request of the ambient thermostat Flashing: it indicates the room pump on without ambient thermostat
	RADIANT PUMP	Off: it indicates the radiant pump off On: it indicates the radiant pump on by request of the radiant thermostat Flashing: it indicates the radiant pump on without radiant thermostat
	RESISTANCES	Off: it indicates resistances off On: it indicates resistances on
	STORAGE	On: it indicates the active storage function
	ANTILEGIO	On: it indicates the active antilegionella function
	CIRCULATION PUMP	Off: it indicates the circulation pump off On: it indicates the circulation pump on
	ALARM	Off: it indicates no alarm On: it indicates at least one alarm Flashing: it indicates at least one warning
	OFFLINE	Off: it indicates Modbus communication On: it indicates no Modbus communication with the heat pump

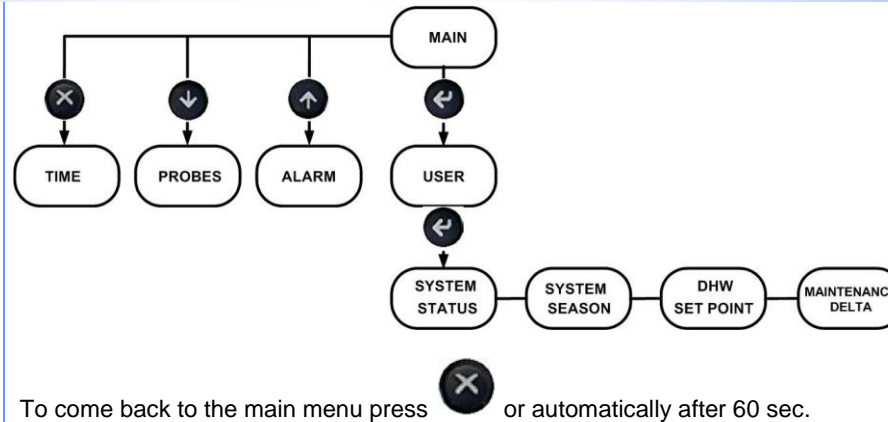
DHW KEYBOARD : ONLY FOR USER

START-UP OPERATIONS SEQUENCE:

1. Set date / hour
2. choose SYSTEM STATE
3. choose SYSTEM SEASON
4. set DHW setpoint
5. set MAINTENANCE DELTA



As soon as it is powered, on the display will appear **LOAD** it is necessary to wait 1 minute for the software loading



	Back to main menu
	Scrolling up
	Scrolling down
	Confirm

TIME	scheduler clock (DHW production and antilegionella cycles)	YR	Year
		MON	Month
		DAY	Day
		HR	Hours
		MIN	Minutes
		SEC	Sec
PROBES	Temperature probe reading	Acc1	BT1 probe
		Acc2	BT2 probe
		IN	Return H2O (read on heat pump)
		OUT	Supply H2O (read on heat pump)
ALARM	It displays the ACTIVE alarms (visible only if active alarms are present)	BT1	BT1 in alarm
		BT2	BT2 in alarm
		H2O	storage temp. no available
		RES	Resistance alarm
		FLO	Flow switch alarm of charged installation
		PDC	Heat pump in alarm or offline
		LTR	Resistance alarm on for low temperature of the storage
USER	SYSTEM STATUS	OFF – DHW only – system only - DHW + system	
	SYSTEM SEASON	Summer / Winter	
	DHW SETPOINT	Dhw temperature	
	MAINTENANCE DELTA	MNITENANCE SET = min DHW temperature = DHWsetpoint – maintenance delta	

DHW PRODUCTION

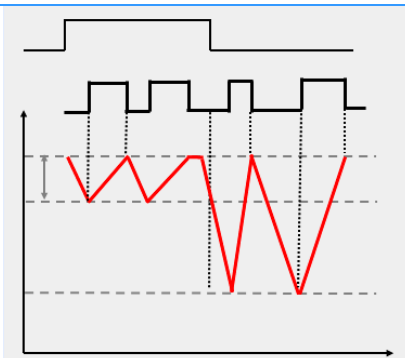
Request by scheduler

Heat pump activation

Storage SetPoint

Sanitary Band

Maintenance SetPoint



STORAGE phase

- It is disabled in the time bands set by the scheduler
- During the recharging the heat pump is activated if $\text{temp} < \text{Storage SetPoint} - \text{Sanitary Band}$
- It end when Storage SetPoint is reached
- To be re-enabled the scheduler must set at zero and then reactivated the control

MAINTENANCE phase

- The heat pump is activated if $\text{temp} < \text{Maintenance SetPoint}$
- The heat pump is de-activated when $\text{temp} = \text{Storage SetPoint}$
- It ends when the scheduler enables again the STORAGE phase

SCH-scheduling

Setting of the time bands :

- DHW production
- Antilegionella cycles
- Activation of the circulation pump on DHW storage

By S01 and S02 the DHW production is enabled ; the antilegionella cycles use the same hours but only during days defined by parameters S03/4/5

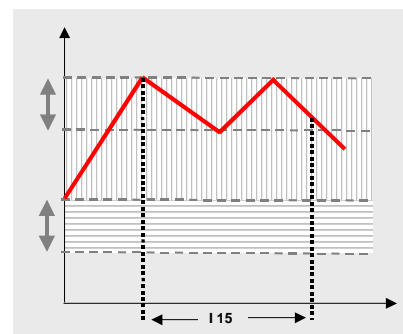
ANTILEGIONELLA CYCLE

LegioSetPoint

Sanitary Band

Storage SetPoint

Sanitary Band



ELECTRIC RESISTANCE zone

ELECTRIC RESISTANCE/ heat pump

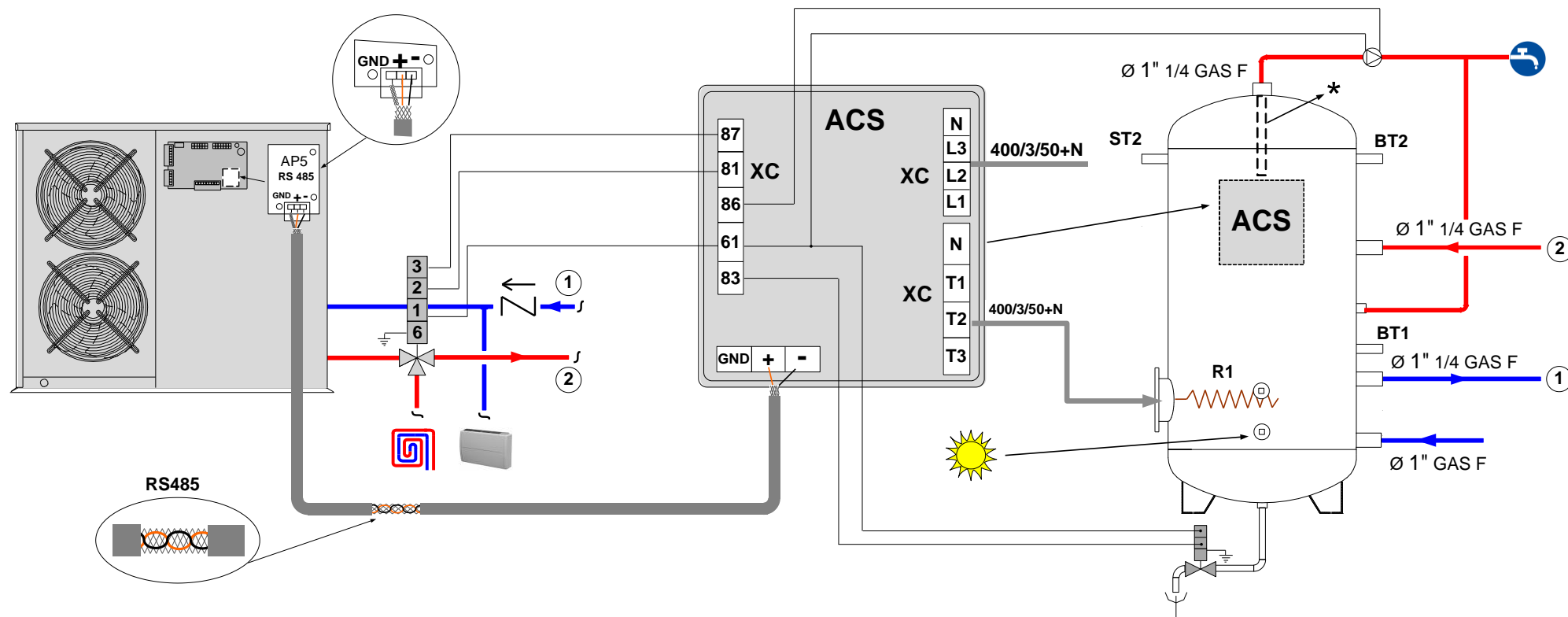
Par	Description	range	UM	def
I14	EnProdLegio	0-1	flag	1
I15	DurataLegio	0-120	min	5
I20	EnRES : 0=without resistances, 1=With resistances	0 - 1	flag	0
I21	NumGradiniRES	0 - 2	num	0

The function is active only with parameters I14 and I20 =1

The antilegionella cycle:

- Is enabled in the time bands set by scheduler
- It uses the electric resistances if $t > \text{Storage SetPoint}$
- It uses the heat pump in the Storage SetPoint zone..... Sanitary Band if the heat pump was already active for the DHW production, otherwise it uses the resistances
- It is always priority on the ambient thermoregulation

Par	Description	Meaning
S01	StartAccumuloLegio	Start hour of storage/antilegionella
S02	StopAccumuloLegio	Stop hour of storage/antilegionella
S03	PeriodoLegio	0=weekly, 1=monthly
S04	GiornoSettLegio	0=mon,....,6=sun
S05	GiornoMeseLegio	It is possible until the 28th month's day
S06	StartPompa	Start hour of the daily circulation
S07	StopPompa	Stop hour of the daily circulation



set-up for solar



Recirculation on domestic hot water facility

- * The magnesium sacrificial anodes assure the boiler anti-corrosive protection .
The wear status of the magnesium bar can be checked without emptying the boiler .
The anode can be replaced if screwing the valve on the plug the water comes out.

1 x



Wiring diagram with module for the management of the domestic hot water production

1 x



1" 1/4 3-way switching valve

1 x



1" 1/4 non-return valve

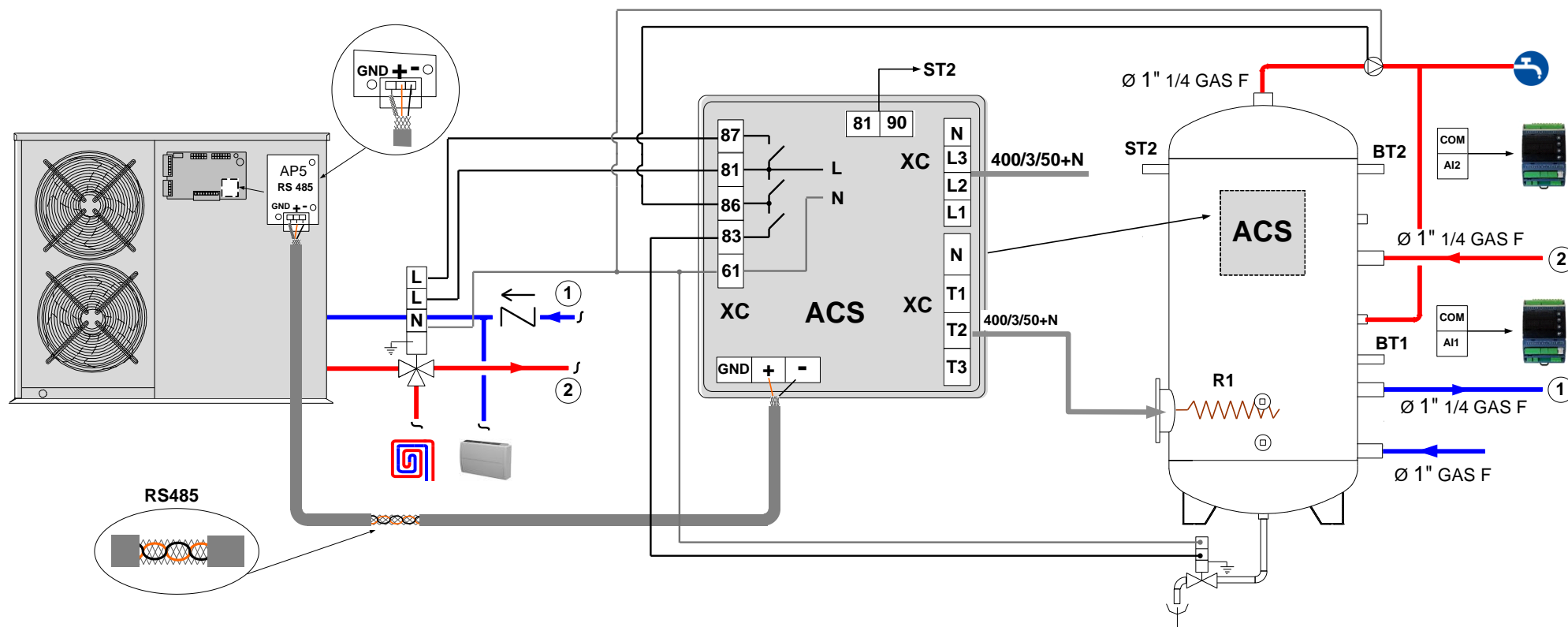
1 x



PEE20016 300 - litres storage with a 2KW resistance; Dimensions 600 x 1680mm.
PEE20018 500 - litres storage with a 4KW resistance; Dimensions 760 x 1690mm.

1 x



Serial communication board + twisted cable from 15 m.



 Recirculation on domestic hot water facility

1 x

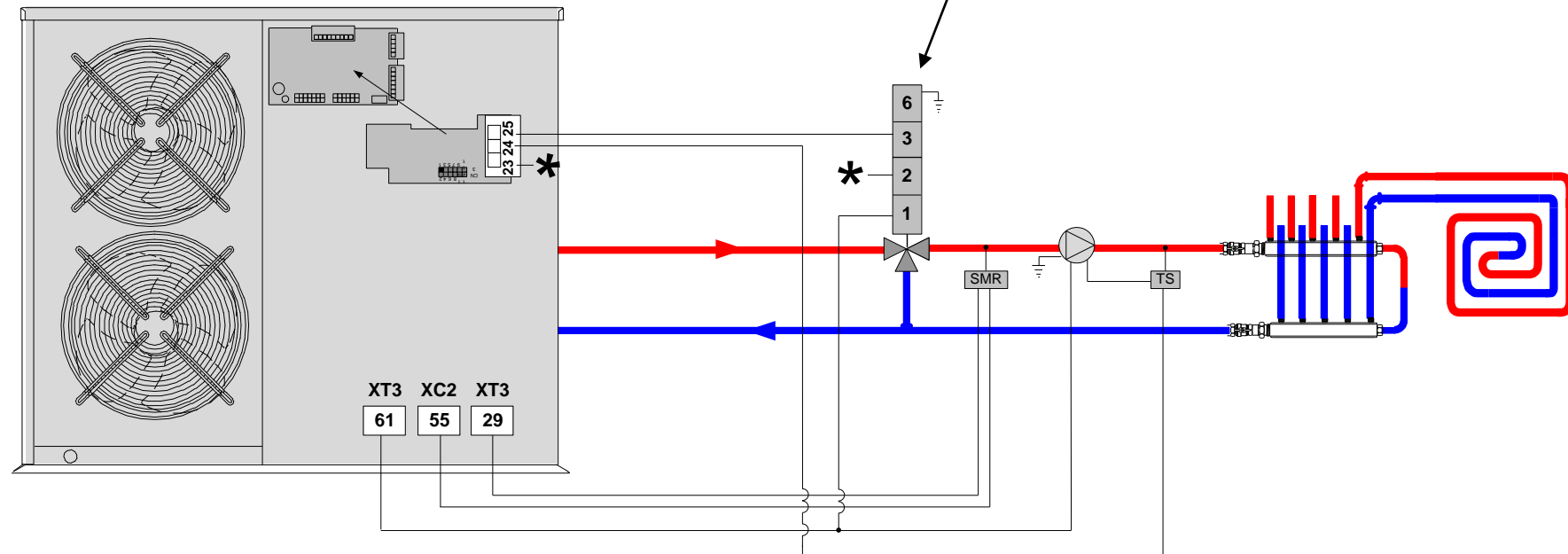


DIMENSIONS

(L x H x P) 290x410x140mm.

Module is made up of:

- 2 water temperature probes 5 m. length. (BT1, BT2)
- 1 safety thermostat 5 m. length (ST2)
- Power circuit and resistance control comprehensive of short circuit protection (**resistance not provided by Clivet**)



1 x



1" 3-way valve with ON-OFF actuator (PEE20012) for PDC (heat pump) from 4 to 18kW

1 x



1 1/4" 3-way valve with ON-OFF actuator (PEE20013) for PDC (heat pump) from 19 to 30kW

1 x



Supply temperature probe of radiant panels (13 metres)

1 x



Temperature safety thermostat (TS)

1 x

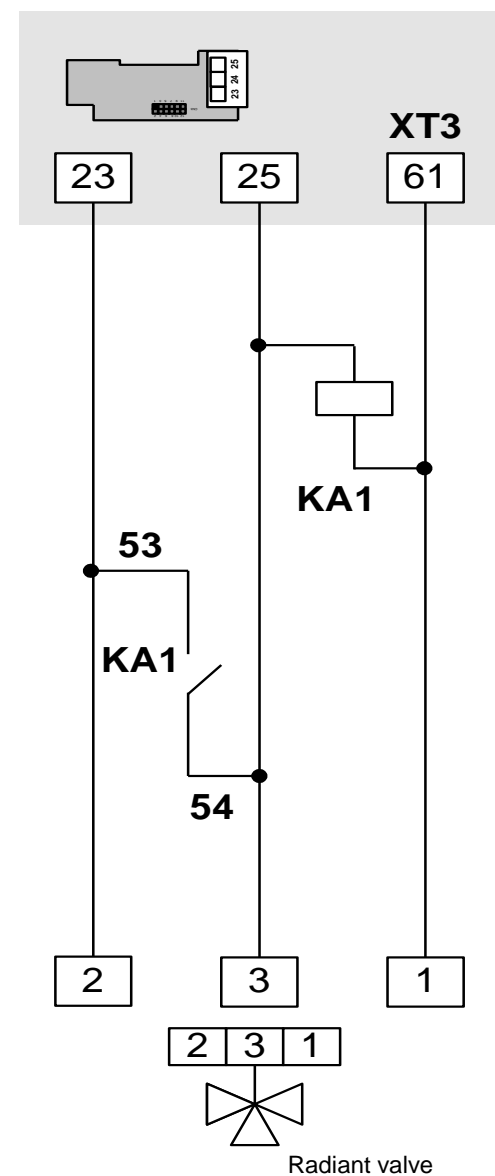
KA1



Relay

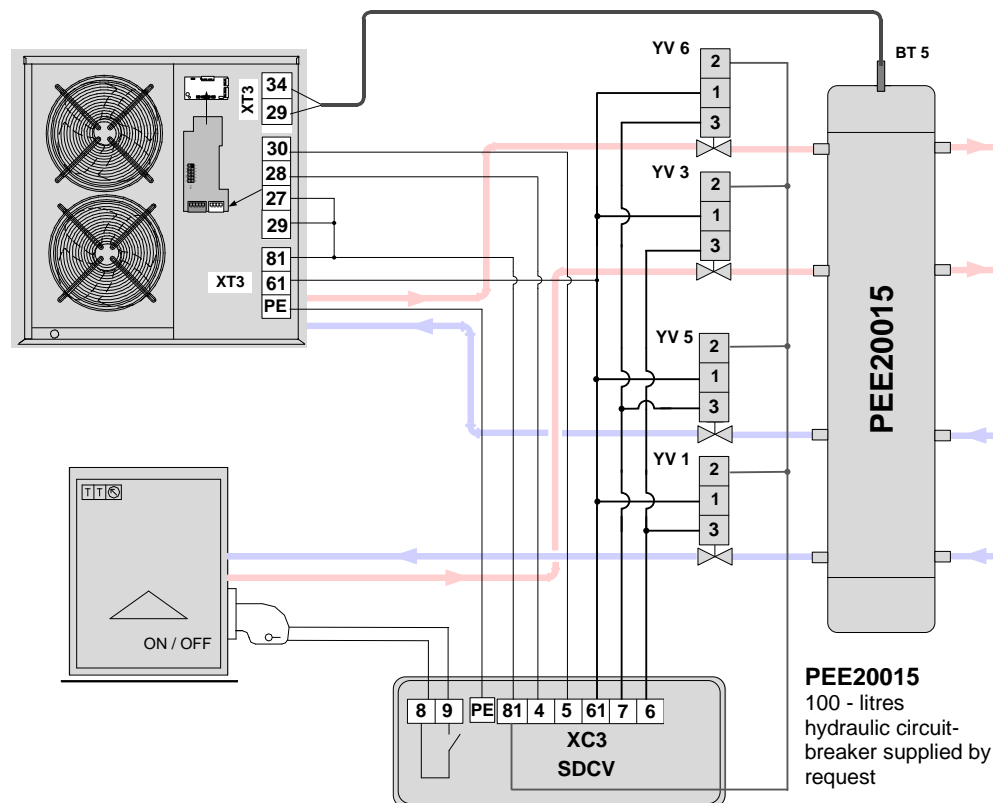
*

Connection diagram



The unit is disabled and the boiler is activated if :

- the outside temperature measured by the probe on the unit is lower than the limit defined by parameter 88.
- The system temperature measured by BT5 is higher than the limit defined by parameter 86.

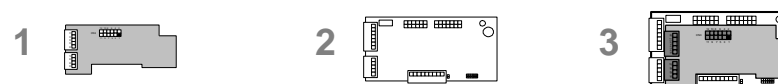


Assemble the PLUG-IN expansion module above the main electronic module using the fitting SPACERS.

Check that all pins under the board are correctly inserted in the connector.

Connect as indicated in the diagram.

Before powering up the unit check the parameter configuration : 140 = 1 (PLUG-IN module enabling).



PAR	MEANING	DEFAULT*
85	Enables Boiler+Heat pump function	0
86	Water temperature value: over it the heat pump is disabled and the YV 5 / 6 output is still excited	55 °C
87	Hysteresis for heat pump enabling and YV 5 / 6 deactivation	2 °C
88	Outside temperature threshold: below it the boiler is enabled	-5 °C
89	Hysteresis for outside temperature for heat pump activation	3 °C

* The values are indicative and can be updated ; in case of doubt contact an authorized service Centre.

2x Motorized 2-way valve for boiler interception for 1"

2 x Motorized 2-way valve for heat pump for 1"

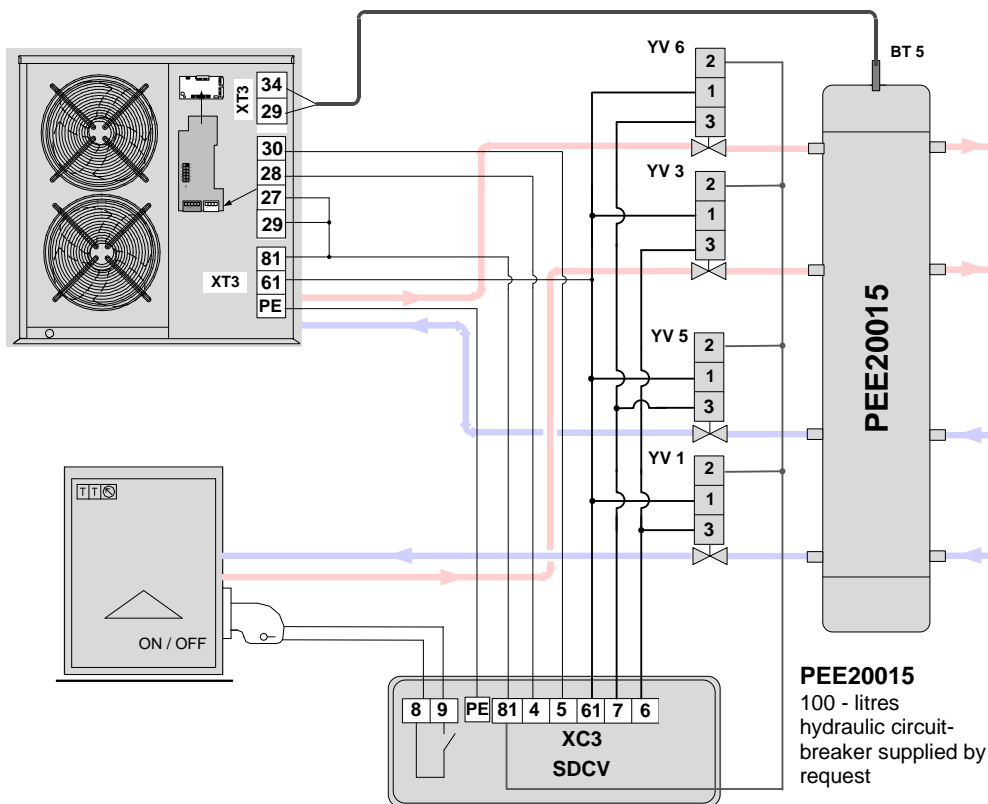
1 x Connector box of valve control

1x KDT3VX valve control board to connect to the heat pump

1 x Temperature probe 12 metres



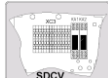

The unit is disabled and the boiler is activated if :

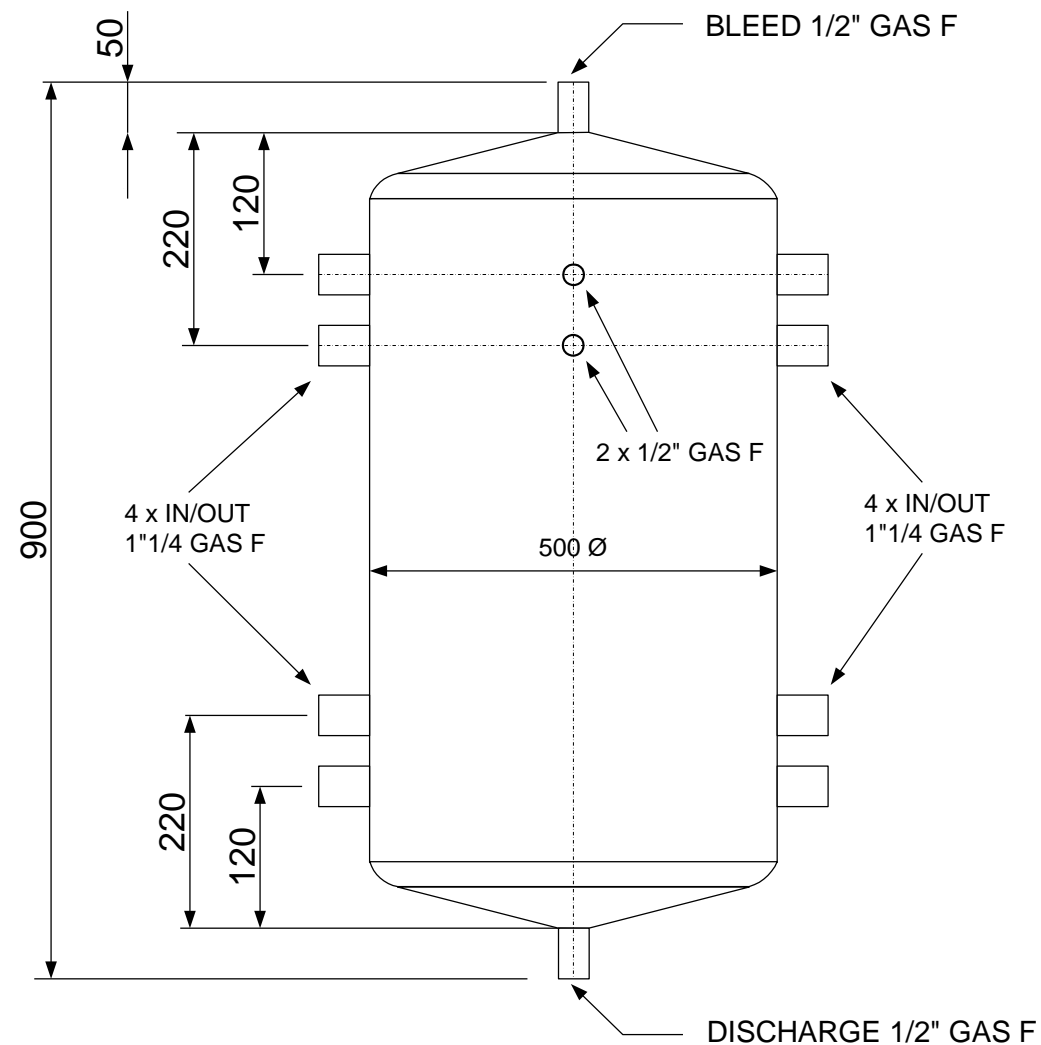
- the outside temperature measured by the probe on the unit is lower than the limit defined by parameter 88.
- The system temperature measured by BT5 is higher than the limit defined by parameter 86.



PAR	MEANING	DEFAULT*
85	Enables Boiler+Heat pump function	0
86	Water temperature value: over it the heat pump is disabled and the YV 5 / 6 output is still excited	55 °C
87	Hysteresis for heat pump enabling and YV 5 / 6 deactivation	2 °C
88	Outside temperature threshold: below it the boiler is enabled	-5 °C
89	Hysteresis for outside temperature for heat pump activation	3 °C

* The values are indicative and can be updated ; in case of doubt contact an authorized service Centre.

2x	 Motorized 2-way valve for boiler interception for 1"	2 x	 Motorized 2-way valve for heat pump for 1"	1 x	 Connector box of valve control
1 x	 BT5 Temperature probe 12 metres				



1 x



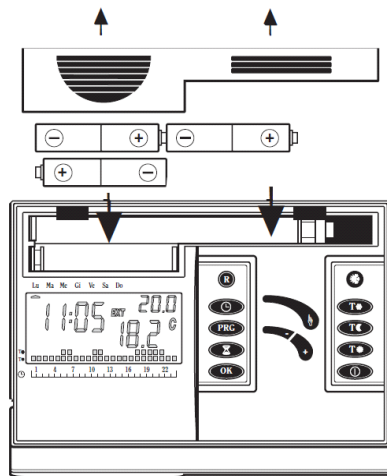
100 - litres hydraulic circuit-breaker

Max. operating pressure 6 bar

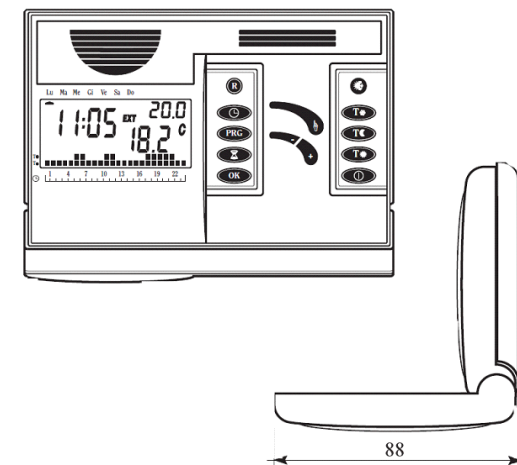
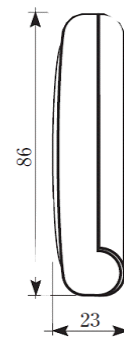
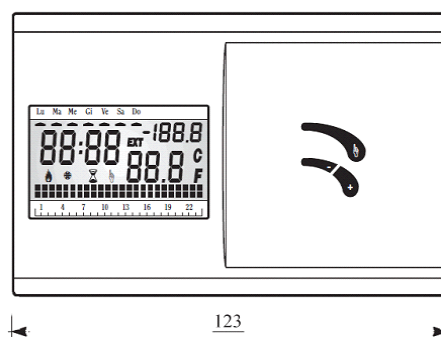
Diameter 500mm, Height 900mm, 8 connections 1" 1/4 e 4 connections 1/2"

For use see details on PEE20017 manual

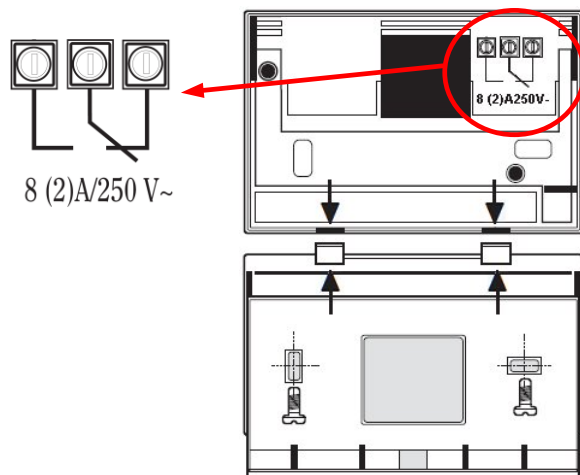
BATTERY REPLACEMENT



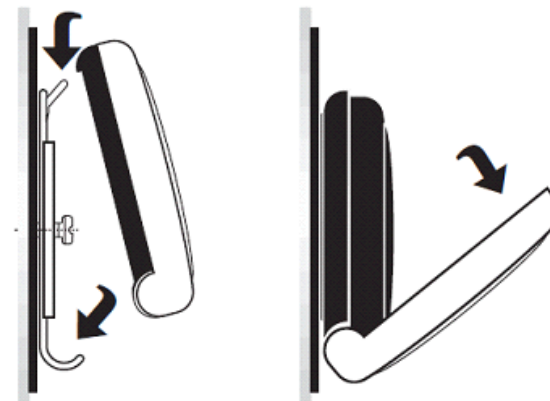
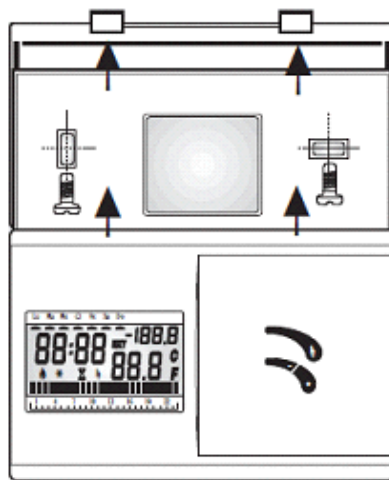
DIMENSIONS



CONNECTIONS



ASSEMBLE

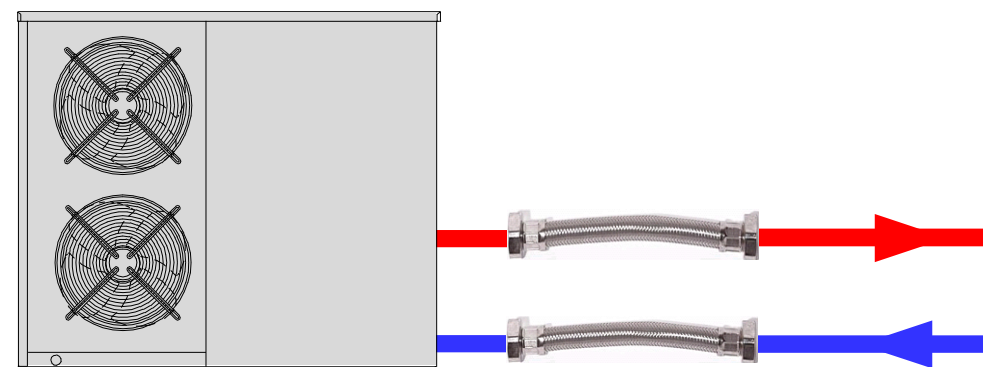




Connection of 1" (PEE20010) between the unit and the system. Length 300 for heat pump from 4 to 18kW



Connection of 1 ¼" (PEE20011) between the unit and the system. Length 300 for heat pump from 19 to 30kW



ELECTRICAL AND HYDRAULIC SYSTEMS

WBAN o WSHN-EE + DOMESTIC HOT WATER + RADIATORS	page 1
WBAN o WSHN-EE + DOMESTIC HOT WATER + RADIATORS + RADIANT PANELS	page 3
WBAN o WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + RADIATORS + BOILER + RADIANT PANELS	page 5
WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + RADIANT PANELS	page 7
WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + FAN COILS	page 9
WSAN-XPR o WSHN-EE + DOMESTIC HOT WATER + FAN COILS + RADIANT PANELS	page 11
WBAN o WSAN-XPR o WSHN-EE o WSAN-EE + BOILER + FAN COILS + RADIANT PANELS	page 13

ACCESSORY KIT

Unit mounted communication parameters	pag. 15
Communication parameters on DHW module	pag. 16
System type managed	pag. 17
DHW parameters	pag. 18
Heat pump parameters	pag. 19
Symbol display	pag. 20
DHW keyboard : only for user	pag. 21
DHW production and antilegionella cycle	pag. 22
PEE20016 / 18 300 or 500 - litres domestic hot water kit KBQRE3X / KBQRE5X	pag. 23
PEE20019 Domestic hot water kit control CACSX	pag. 24
PEE20012 /13 Kit for management of radiant panels with connections of 1" – 1" ¼ KVMSP1X / KVMSP2X	pag. 25
PEE20014 Boiler management kit KVICX	pag. 27
PEE20020 Boiler management kit (only for WBAN) KVICX	pag. 28
PEE20015 100 - litres hydraulic circuit-breaker KSAX	pag. 29
PEE20017 Wall electronic ambient thermostat KITERAX	pag. 30
PEE20010 / 11 Water connection hoses with 1" – 1" ¼ connections KTFL1X / KTFL2X	pag. 31

31-05-10 **MODIFICATIONS RISPECT REV.01**

Valve wirings pages 6, 14, 27

MODIFICATIONS RISPECT REV.0

Revision images

On the beginning pages: insert text about destination and purpose of the guide

From page 15 to 22 revision: heat pump and DHW parameters and operations

Page 24 entered PEE20019

Page 25 - 26 up-to-date electrical connections, inserted image

Page 28 entered PEE20020

Page 31 up-to-date index

New type of codification used

MODIFICATIONS RISPECT REV.00

Page 16 added parameter I36

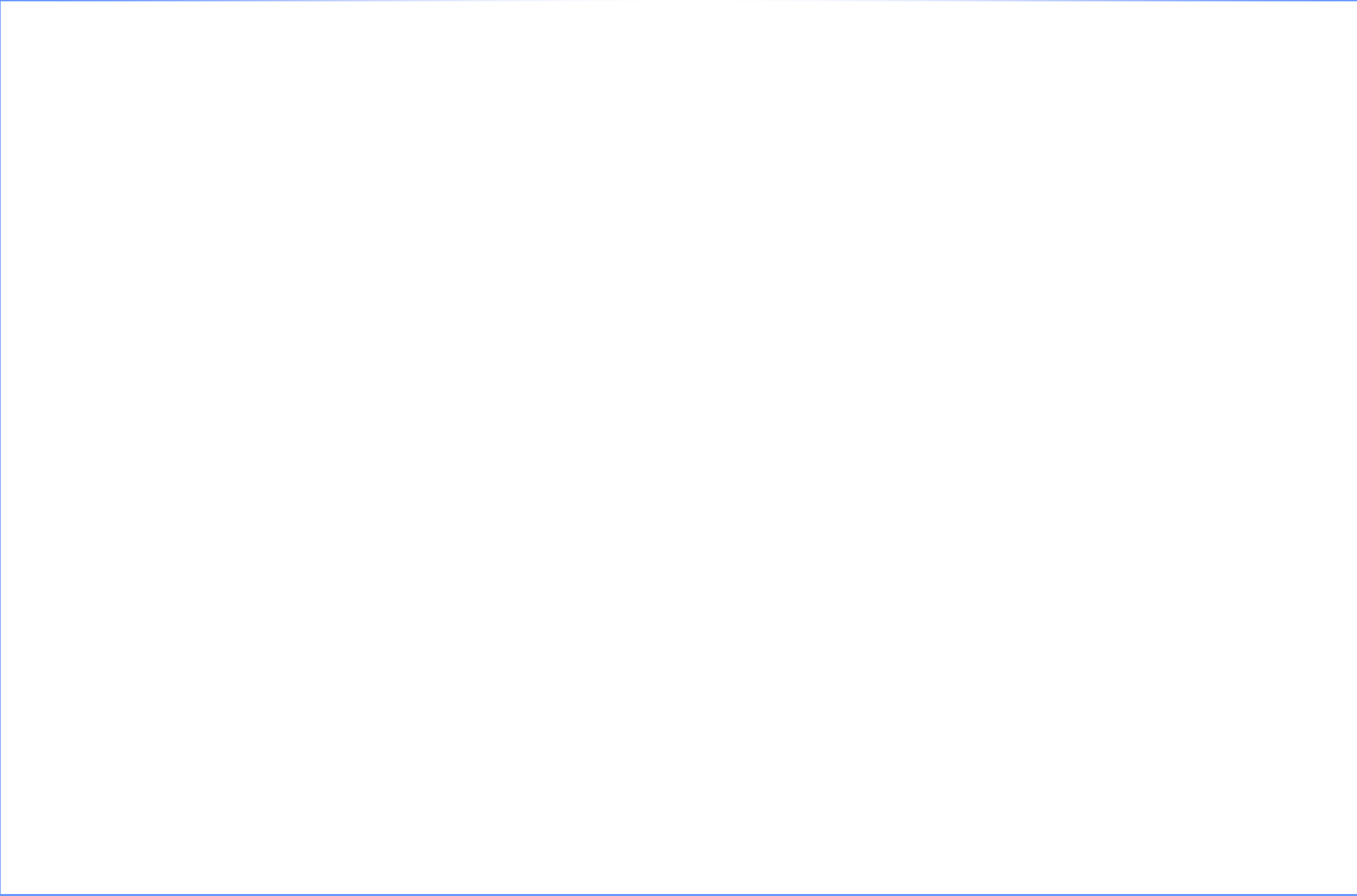
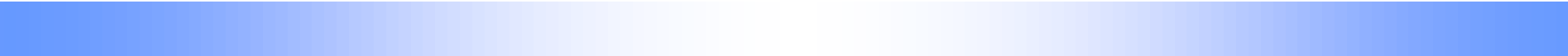
Page 21 added active LTR or FLO alarm

Page 22 replaced DHW graphic

Page 23 and 24 image correction

Page 26 correction of the valve description

Page 27 and 28 correction of data tables



CLIVET SPA Feltre (BL) ITALY Tel. + 39 0439 3131 Fax + 39 0439 313300 info@clivet.it	CLIVET UK LTD Fareham (Hampshire) U.K. Tel. + 44 (0) 1489 572238 Fax + 44 (0) 1489 573033 info@clivet-uk.co.uk	CLIVET SAS Verrierès le Buisson - FRANCE Tel. + 33 (0)1 69 20 25 75 Fax + 33 (0)1 69 20 60 76 info.fr@clivet.com	CLIVET ESPAÑA S.A. Madrid - SPAIN Tel. + 34 91 6658280 Fax + 34 91 6657806 info@clivet.es	CLIVET GmbH Norderstedt - GERMANY Tel. +49 (0) 40 32 59 57-0 Fax +49 (0) 40 32 59 57-194 info.de@clivet.com	CLIVET NEDERLAND B.V. Amersfoort - Netherlands Tel. + 31 (0) 33 7503420 Fax + 31 (0) 33 7503424 info@clivet.nl	CLIVET RUSSIA Moscow - RUSSIA Tel. +74956462009 Fax +74956462009 info.ru@clivet.com	CLIVET MIDEAST FZC Dubai - UAE Tel. +97 14 3518501 Fax +97 14 3518502 info@clivetme.com	CLIVET TF AIR SYSTEMS (P) LTD. Malur - INDIA Tel. +91 8151 232683/5 Fax +91-8151-232684 info@clivettfa.com
--	--	--	---	---	--	---	---	--

The data contained in this bulletin is not binding and may be changed by the manufacturer without prior notice.

All reproduction, even partial, is PROHIBITED.

© Copyright - CLIVET S.p.A. - Feltre (BL) - Italia